

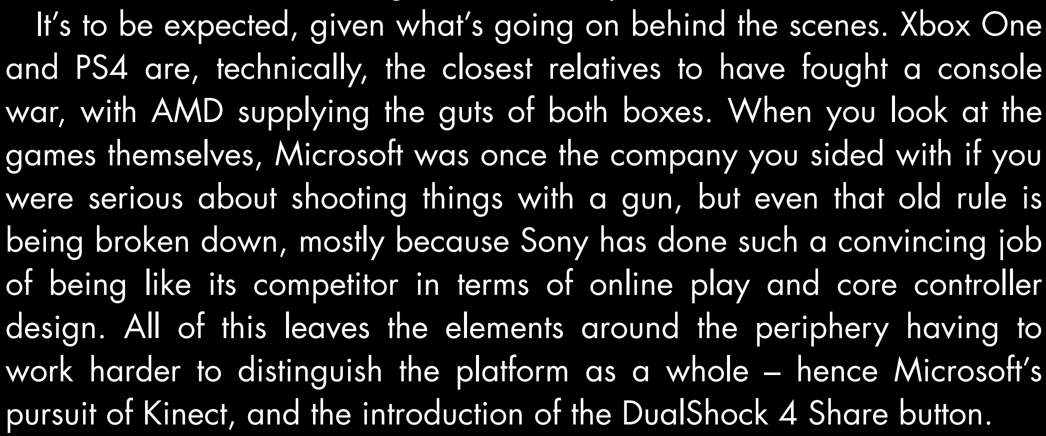
EDGE®
THE FUTURE OF INTERACTIVE ENTERTAINMENT
EDGE-ONLINE.COM
THE LAST OF US MEETS PS4
THE INSIDE STORY
SUNSET OVERDRIVE
EXCLUSIVE: INSOMNIAC'S EXPLOSIVE ARRIVAL ON XBOX ONE
REZ CREATOR TETSUYA MIZUGUCHI ON HIS RETURN TO VIDEOGAMES
#267
JUNE 2014
REVIEWS
TRIALS FUSION
MARIO KART 8
HEARTHSTONE: HEROES OF WARCRAFT
THE ELDER SCROLLS ONLINE
CHILD OF LIGHT



An exclusive release that feels genuinely exclusive



Remember when you could look at a screenshot of a game and have a reasonable chance of knowing which system it was running on? In the old days, computer and console hardware generated imagery that felt unique to them: ZX Spectrum games looked sharp but horrendously limited in their use of colour, and C64 games were chunky and a little washed-out. NES owners quickly became accustomed to Nintendo's muddy 8bit colour palette, while Master System users enjoyed a bombardment of luminous reds, blues and greens that helped the console impersonate the excesses of Sega coin-ops such as *Space Harrier* and *OutRun* even when it was otherwise so wretchedly ill-equipped for the job. The N64/PlayStation era was the last one in which, from a glance at a screen, we could make an easy call between competing formats. Today, the goal for the platform holder is to look at least as good as its competitor, not different.



It's to be expected, given what's going on behind the scenes. Xbox One and PS4 are, technically, the closest relatives to have fought a console war, with AMD supplying the guts of both boxes. When you look at the games themselves, Microsoft was once the company you sided with if you were serious about shooting things with a gun, but even that old rule is being broken down, mostly because Sony has done such a convincing job of being like its competitor in terms of online play and core controller design. All of this leaves the elements around the periphery having to work harder to distinguish the platform as a whole – hence Microsoft's pursuit of Kinect, and the introduction of the DualShock 4 Share button.



As the videogame industry's crawl toward homogeneity continues, Insomniac's *Sunset Overdrive* looks like a game we can really get behind. It is, as its creators explain in our cover story, the result of wanting to make something that stands apart in 2014. It's not an FPS, it isn't swamped in browns and greys, and it has a weapon that launches vinyl records. For Xbox One and videogames as a whole, that feels like a victory already.

games

Hype

34 **Landmark**
PC

38 **Quadrilateral Cowboy**
PC

42 **Borderlands: The Pre-sequel**
360, PC, PS3

46 **Batman: Arkham Knight**
PC, PS4, Xbox One

48 **N++**
PS4

50 **Nosgoth**
PC

52 **Hype Roundup**

42

Play

100 **Mario Kart 8**
Wii U

104 **Trials Fusion**
360, PC, PS4, Xbox One

108 **The Elder Scrolls Online**
PC, PS4, Xbox One

112 **Kinect Sports Rivals**
Xbox One

114 **Child Of Light**
360, PC, PS3, PS4, Wii U, Xbox One

116 **Hearthstone: Heroes Of Warcraft**
iOS, PC

118 **Kirby: Triple Deluxe**
3DS

119 **Mercenary Kings**
PC, PS4

120 **Fract OSC**
PC



104



Explore the iPad edition of **Edge** for additional content



Follow these links throughout the magazine for more content online



#267

sections

JUNE 2014

Knowledge

8 The last of it
Naughty Dog's Neil Druckmann on bringing Joel and Ellie to PS4

12 Virtual boys
Indie developers talk virtual reality ahead of July's Develop

14 Talking a good game
The videogame commentators bringing eSports to the masses

16 A light touch
The surreal, minimalist beauty of adventure *A Light In Chorus*

18 Soundbytes
Adriel Wallick and Palmer Luckey on the past and future of TV

20 My Favourite Game
Imran Yusuf on *Shenmue* and being GamesAid's first patron

22 This Month On Edge
The things that caught our eye during the production of **E**267

Dispatches

24 Dialogue
Edge readers share their opinions; one wins a Turtle Beach headset

26 Trigger Happy
'Videogame' is an outdated description, argues Steven Poole

28 Difficulty Switch
Ian Bogost considers consoles' tenuous relationship with TV

30 Big Picture Mode
Nathan Brown on Facebook, Oculus and Internet mistrust

145 Postcards From The Clipping Plane
James Leach reaches for pizza and clocks on for the late shift

Features

56 Delirious
We visit Insomniac to play *Sunset Overdrive*, the studio's outlandish Xbox One debut

68 An Audience With…
Sega Rally and *Rez* creator Tetsuya Mizuguchi tells us about his return to game development

74 Boss rush
We square up to one of videogames' longest-running traditions: the boss fight

82 Life after death
How the guardians of gaming's past are ensuring that yesterday's systems will never be forgotten

90 The Making Of…
We roll back the clock on Keita Takahashi's strange and delightful PS2 classic *Katamari Damacy*

94 Studio Profile
Why Bugbear Studios has chosen crowdfunding over publishers for *Next Car Game*

122 Time Extend
We rejoin John Marston on the trail of Rockstar's Western epic *Red Dead Redemption*

128 Region Specific
Inside the city state meticulously producing some of the world's most successful online games

68

56

90

74



EDITORIAL

Tony Mott editor in chief **Mark Wynne** senior art editor
Nathan Brown games editor **Matthew Clapham** production editor
Michael Gapper news/features editor **Ben Maxwell** writer
Helen Wilson iPad production assistant **Andrew Hind** art editor
Neil Long editor, edge-online.com

CONTRIBUTORS

Jon Blyth, Ian Bogost, Martin Davies, Matthew Edwards, Steve Hogarty, Martin Holtkamp, James Leach, Edward Lewis, Richard Moss, Steven Poole, Daniel Robson, Joel Snape, Chris Thursten, Alvin Weetman, Alex Wiltshire

BUSINESS

Steve Turner account manager **Jas Rai** advertising sales manager **Charlie Said** sales director
Adam Jones senior product manager **Sam Wight** group marketing manager **Tilly Michell** marketing executive
Declan Gough head of creative and design **Clair Porteous** deputy MD, film and games
Nial Ferguson managing director, technology, film and games

CONTACT US

Editorial +44 (0)1225 442244 edge@futurenet.com
Advertising +44 (0)20 7042 4219 jas.rai@futurenet.com
UK print subscriptions 0844 848 2852
International print subscriptions +44 (0)1604 250145
Subscribe online at www.myfavouritemagazines.com

FUTURE GAMES UK

Tim Clark group senior editor **Graham Dalzell** group art director

FUTURE UK

Robin Abbott creative director **Jim Douglas** editorial director

CIRCULATION

Matt Cooper trade marketing executive **Rachael Cock** trade marketing director
John Lawton international account manager

PRINT & PRODUCTION

Mark Constance production manager **Frances Twentyman** production controller
Nathan Drewett ad production co-ordinator

LICENSING

Regina Erak senior licensing and syndication manager

If you would like to purchase the images featured in this publication, please visit www.futuremediastore.com or email mediastore@futurenet.com

Printed in the UK by William Gibbons. Covers printed by Philtone Litho Limited. Distributed in the UK by Seymour Distribution Ltd, 2 East Poultry Avenue, London, EC1A 9PT (+44 (0)20 7429 4000)

Want to work for Future? Visit www.futurenet.com/jobs

Future Publishing, 30 Monmouth Street, Bath, BA1 2BW
Telephone: +44 (0)1225 442244
Fax: +44 (0)1225 732275



We are committed to only using magazine paper which is derived from well managed, certified forestry and chlorine-free manufacture. Future Publishing and its paper suppliers have been independently certified in accordance with the rules of the FSC (Forest Stewardship Council).





Future produces high-quality multimedia products which reach our audiences online, on mobile and in print. Future attracts over 50 million consumers to its brands every month across five core sectors: Technology, Entertainment, Music, Creative and Sports & Auto. We export and license our publications.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR).
www.futureplc.com

Chief executive Zillah Byng-Maddick
Non-executive chairman Peter Allen
Tel +44 (0)207 042 4000 (London)
Tel +44 (0)1225 442 244 (Bath)



Print 14,351
Digital 6,134

The ABC combined print, digital and digital publication circulation for Jan–Dec 2013 is
20,485
A member of the Audited Bureau of Circulations



Specialist Magazine Of The Year



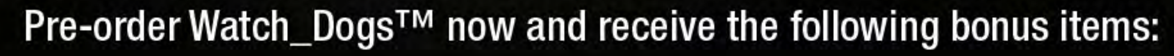
PRE-ORDER

WATCH_DOGS



£39.99

www.gamefly.co.uk/preorderwatchdogs



The Blume Agent Pack:

- Blume Agent Outfit
- Blume Weapon Perk: Less recoil on shots



Releases 27 May 2014



The last of it

Naughty Dog sends The Last Of Us out with a definitive edition for PlayStation 4


Neil Druckmann, creative director of *The Last Of Us*

The Last Of Us for PS4 isn't the first 1080p remake for the new generation of consoles, but it might be the most difficult. Other developers have had something of a head start, thanks to the combination of having already created high-quality PC versions and the PC-like architecture of PS4 and Xbox One. *The Last Of Us*, however, was made exclusively for one of the most tricky pieces of hardware developers have ever had to support. Worse, it's the pinnacle of technical achievements on the console, using an engine custom built for PS3 and code optimised to take advantage of every quirk of the hardware Naughty Dog discovered making PS3 games for seven years. Porting a game from PS3 to PS4, it seems, is harder than it looks.

"I wish we had a button that was like 'Turn On PS4 Mode', but no," creative director **Neil Druckmann** says. "We expected it to be Hell, and it was Hell. Just getting an image onscreen, even an inferior one with the shadows broken, lighting broken and with it crashing every 30 seconds… that took a long time. These engineers are some of the best in the industry and they optimised the game so much for the PS3's SPUs specifically. It was optimised on a binary level, but after shifting those things over [to PS4] you have to go back to the high level, make sure the [game] systems are intact, and optimise it again.

> "I wish we had a button that was like 'Turn On PS4 Mode', but no. We expected it to be Hell, and it was"

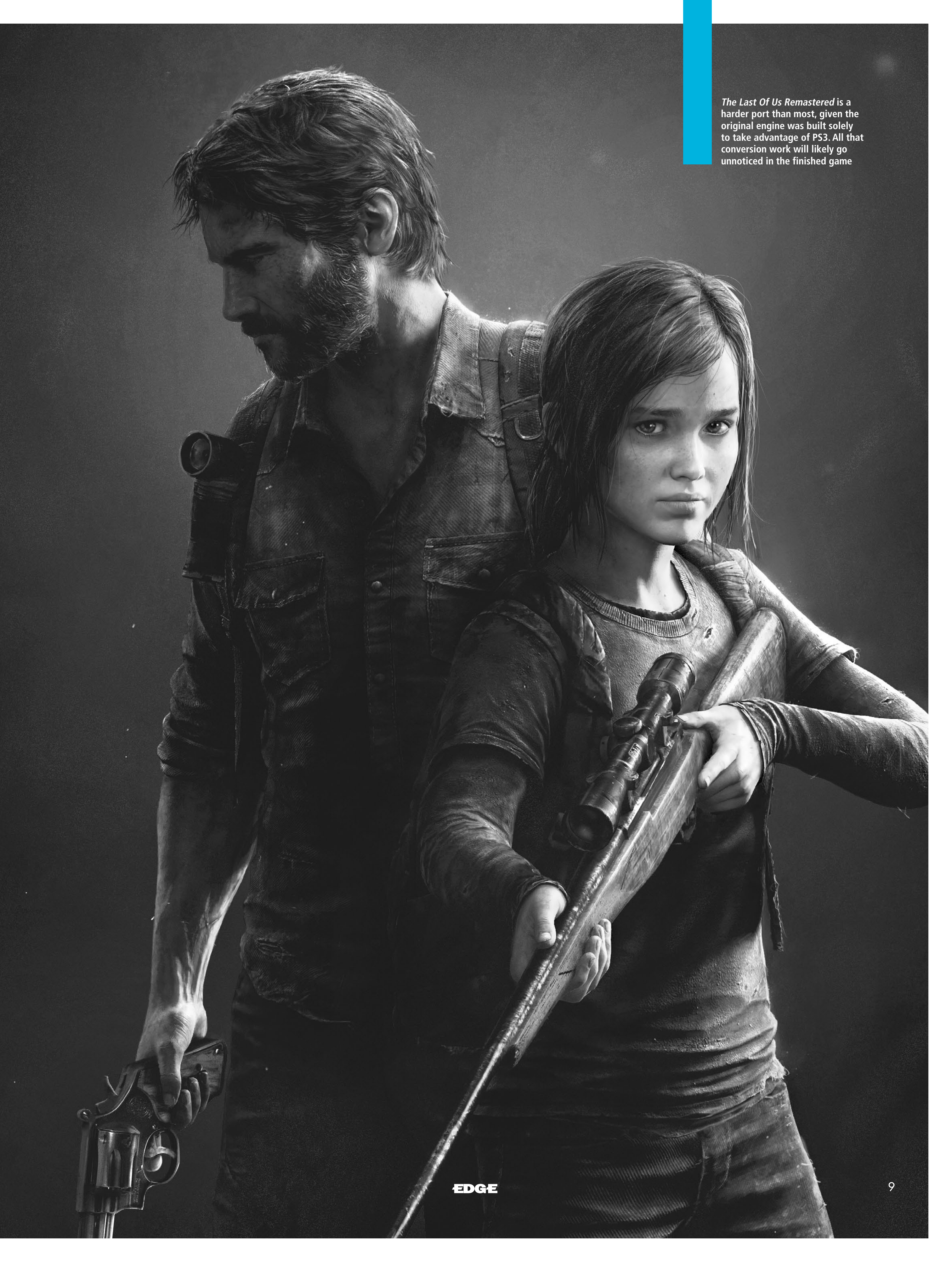
"I can't describe how difficult a task that is. And once it's running well, you're running the [versions] side by side to make sure you didn't screw something up in the process, like physics being slightly off, which throws the game off, or lighting being shifted and all of a sudden it's a drastically different look. That's not 'improved' any more; that's different. We want to stay faithful while being better."

Naughty Dog had only a handful of advantages when development began, shortly after completion of the game's *Left Behind* DLC. An audio commentary for the cutscenes had already been recorded, but was never used, and many models and textures already existed at a higher quality than could be put onscreen by a PS3. Character models built for cutscenes use more triangles than those in-game, and multiple versions of objects were built with higher-quality models swapped in and out depending on its prominence in the frame. On PS4, those models could be used everywhere.

Rumour says *Gran Turismo 6*'s new car models were built to a level of detail far beyond PS3's GPU, future-proofing them for the inevitable *GT7*. *The Last Of Us* was never built to be ported or even with recycling in mind, but its assets were built in a similar fashion. "We always build the best possible assets and then we can make the call when things aren't fitting onscreen or in the frame buffer or in memory," Druckmann says. "That way we can pick and choose what we need to emphasise in a moment, and where there's a compromise on what can [be more detailed] or reduced to a lower quality. We don't build it with high assets in mind to then port it, but it did give us a leg up. If we hadn't done that, we might not have made the call to bring it over to PS4.

"It still means rebuilding the assets, throwing them in, seeing how the new streaming works, working with the new hard drive and the new OS that you have to write whole new systems for. We knew the areas that were problematic on the PS3, where we were hitting a technical bottleneck, so they were the easiest areas to improve. We brought in all the hi-res models, and then it's on par with what you saw in the cutscenes. There's an improved lighting model. After that, we started looking across the board; enemies look a little blurry up close, so that was pretty easy. We ramped those up and saw a pretty significant difference. Our cinematics are now running at 1080p and 60fps, and that involved rendering them all from scratch. It's interesting that now [instead of a technical bottleneck], the bottleneck is 'Can we fit all this on the disc?'"

The Last Of Us Remastered is an important piece of fan service – every time the developers conversed with Reddit, the request came up, even before the PS3 game's release – but it was also an important test of the ▶



The Last Of Us Remastered is a harder port than most, given the original engine was built solely to take advantage of PS3. All that conversion work will likely go unnoticed in the finished game






The PS3 game's art changed from this early concept work. The remaster marks Naughty Dog's last chance for edits, but the urge was resisted

HAVE A LITTLE FAITH
Asked about lessons learned during development on *The Last Of Us*, one in particular jumps to Druckmann's mind. "One of the things Bruce [Straley] and I have been talking about is to trust the process, trust the team, keep the faith," he says. "You start with an idea that you're really excited by, and then after three or more years, you know you're failing. You're trying something new and it's not working out. To have the confidence to say that it's OK is the thing. For me, personally I had moments where I was really stressed and thinking it wouldn't come together and I lost the faith. I forgot how, as a studio, as a team, we all come together at the very end and just make it work under the pressure of a deadline. At the end, you fire on all cylinders; the game makes huge strides at the very end. When you're starting a new project and you're getting that initial excitement you have to remember that failure and low points are part of the process of making something new and fresh. Maybe that will keep me a little healthier going forward."

studio's tools. "Going from PS2 to PS3, we actually had to throw out most of our work for the engine," Druckmann says. "We were using a proprietary programming language that was developed by Andy Gavin and some of the other programmers, so we knew when we started the engine that would support the first *Uncharted* game that we were engineering it with [the future] in mind. Going forward, we wanted to use that same engine on whatever platform we would eventually be working on. Even on in the early days of PS3, we were thinking of the transition to PS4, because of how hard transitions have been in the past. One way to [test the tools] is to take an existing game and port it, and *The Last Of Us Remastered* gave us an excuse to bring those systems over, refine them and optimise them for the hardware.

"At first, there was a pretty small team of two or three programmers, experimenting and trying to answer the questions of what it would take to port it over, so we could decide whether it was worth it or not. We put in a pretty significant programming staff to port all the graphics systems over, the physics, the AI, the scripting language. It's not an insignificant team, but it's not as large as a full-scale production."

Missing from the permanent team were the designers. Visuals aside, *The Last Of Us Remastered* is an untouched port, even going to far as to leave in common points of complaint, such as the difficulty spike when Joel, Tess and Ellie first arrive downtown. "[Game director] Bruce [Straley] and I always laugh about this," Druckmann says. "We have a really hard time playing the game, because we constantly see things and think, 'Oh, man, I could've done that better, I could've written that better, that animation pop over there, that transition…' but once you start going down that road, where do you stop? At what point are you making the experience just different or worse?

"Star Wars comes to mind. I'm more of a fan of the original cut and Han Solo shooting first. The *Metal Gear Solid* remake on GameCube [is good, but] I loved the original. I have so much attachment to that one that any shifts in the dialogue, or even in the moment-to-moment gameplay, [mean] something about it feels so different that it becomes inferior in my mind. It's only subjective, but there's something nice about saying, 'We've finished it'. That's what we put out there, that's the final experience – now it's just about a locked frame rate and all the hi-res textures and assets our amazing artists created. I would like to say the game is the game, so I'd like to just bring it over to the PS4 and get a more solid version of the same experience."

> "We constantly see things and think, 'Oh, man, I could've done that better, I could've written that better'"

Designers would work on the game to check systems, and work is ongoing regarding just how the reworked *The Last Of Us* will use PS4's DualShock 4, with its new triggers, sticks and touchpad. "Right now, it's still a straightforward port," Druckmann says, "but there are things I'd like to do. I love the feel of the triggers on the PS4, so I want to give the option to switch which triggers you use to shoot and which ones you're using to listen and crouch. Then there are some ideas of how to use the touchpad that we'll play with and see if it's worth it. Mostly, we don't want to mess with the experience too much, and we don't want to deviate from what made *The Last Of Us* so great."

The few additions are optional extras that were always intended to be enjoyed with the original game. The *Left Behind* DLC, set before the main story, will become available at the game's conclusion, and an audio commentary for the cutscenes will be available from the start. "That was something we did at the end of production for PS3," Druckmann says. "I don't remember if we could have fit it on the disc, but [it didn't matter because] we didn't have time to edit it. It's Troy Baker [Joel], Ashley Johnson [Ellie] and me sitting down and watching all the cinematics, talking about our experience of crafting those characters and bringing them to life. It will play through the cinematics and there will be an audio option to change from the regular audio to the behind-the-scenes commentary."

With the addition of the DLC and commentary atop the visual overhaul, this will be the definitive version of *The Last Of Us*, Druckmann says. But illustrating the sheer amount of work that's gone into remastering the game is a challenge nobody ever anticipated. A half-decade or more of publishers' bullshots created in Photoshop or produced by monster PCs outputting a 4K image has made selling the visual quality of new generation games a difficult task, and the online spaces games are marketed in aren't up to the task of showing off *The Last Of Us Remastered*.

"How do you show it on the Internet? Any next-gen game?" Druckmann asks. "We have the game running in 1080p at 60fps, and YouTube brings it down to 30fps and does a compression on it, and it's hard to tell the difference. When you see it



running on your big TV and you see all the hi-res assets running smoothly, it's hard to go back to the previous version after that, but it's hard to show all the work, the optimisation and the artistry that went into it. We're still trying to figure out what the best way to do that is. We tried to put a non-compressed version of the trailer running at 60Hz for people to download, but it's several hundred MBs. It's a huge file. Maybe there's something on PSN where we can make this stuff available, but it's something we have to address."

The end result is "akin to looking at a DVD versus Blu-ray," Druckmann says. "It's not a totally brand-new experience, but when you're seeing the film, the clarity of the image is much closer to how the director and the team initially saw it. There's something nice about that. I think if there was nothing but remakes, that would be pretty sad for the console. Just like any system out there, any medium, it's going to be a mixture. We're working on this re-release, but at the same time we're working on two other brand-new experiences. When Blu-ray came out, the first thing is you buy all these rereleases of movies that you've loved, and then you see Gravity and you can't wait to see it on your Blu-ray. There's always room for a mixture of old and new. "

It is, says Druckmann, the very beginning of what Naughty Dog can achieve on PlayStation 4. "If you look at *Uncharted 1* and then look at *Uncharted 3* or *The Last Of Us*, you'll see a pretty big difference as we have a better understanding of the hardware and how to build assets for it. So while I believe you'll see a big improvement between *The Last Of Us* on PS3 and PS4, we're just getting started with the new generation." ■

Models used in cutscenes now run natively in-game. The subtler details will be wasted when the camera sits so far from players, but every detail counts at 1080p

Virtual boys

Four indie developers set to feature at this year's Develop tell us about the potential of a VR revolution






From top: indie Mike Bithell, nDreams' Patrick O'Luanaigh, Dlala's Anthony James Grand-Scrutton, and Capy's Nathan Vella

With Oculus Rift, Sony's Project Morpheus and Valve's own experiments reinvigorating interest in virtual reality, much of the conversation at this year's Develop – taking place July 8–10 in Brighton – will focus on the potential for new gaming experiences using the technology.

And it's indie developers, according to Sony, who will most benefit from the early rush of enthusiasm as they define the early scene and 'hit big' in a space relatively free from competition. But is VR really the golden opportunity that it appears to be?

"There's probably some truth to Sony's statement," says *Thomas Was Alone* creator **Mike Bithell**, whose Develop talk will focus on the potential dangers of romanticising the realities of indie development. "But I think the truth there is less about the ingenuity of indies and more about the scale of our risk taking. Ultimately, an indie making a VR game isn't as big a risk as adding VR to *Watch Dogs*.

"So, yes, I suspect that in the first the year, the cool stuff will be coming from indies, just because we're able and stupid enough to do it! But the second any of us make any money, that will change very quickly."

"For Sony specifically," adds **Nathan Vella**, co-founder and president of Capybara Games, who's keeping the nature of his talk under wraps for now. "I believe they can't help but see how Vita is being pushed in the west by smaller teams and ports of great independent titles. They know fostering that on other new platforms can help to answer the 'show us the games' demand all new platforms hear from their players."

> "The cool stuff will be coming from indies, just because we're able and stupid enough to do it!"

Dlala Studios CEO **Anthony James Grand-Scrutton**, whose talk will outline the experience of being an indie studio incubated within Microsoft's Soho-based Lift London, shares Bithell's mix of enthusiasm and caution."I'm really torn on the VR issue," he says. "VR is fantastic, and I think you can make some great creative experiences with it, but until it's a completely worldwide consumer thing where the majority of gamers are using it, it's a lot of work to make a game that's VR compatible.

"Unity's made things easier now – with some tweaks and some exporting, it's not that bad – but VR is still a separate platform, a separate development cycle. I really hope it's successful, because there's some fantastic stuff out there for it, but at the same time, right now it's not viable for us to look at."

NDreams has taken the opposite stance, focusing its efforts into a VR-centred adventure game for Rift and Morpheus. CEO **Patrick O'Luanaigh** will be using his Develop session to show a little of the game and talk about the challenges the team has faced designing for it. Understandably, he's fully invested in VR's potential for smaller devs.

"We will see, I'm sure, some big triple-A games trying to support VR," he says. "And they may do that fairly well, but over the next year or two, until the installed base is so massive that the likes of EA and Ubisoft have got their big studios working on it, I think we'll see some really talented studios making games that are designed specifically for VR, and built around that.

"The great thing is that, just like the way Steam and PSN works now, you can have games like *Thomas Was Alone* alongside *Call Of Duty*. There's so many different types of games and so many different budget levels of games."

But even O'Luanaigh is keeping his options open, not entirely prepared to commit to a VR-exclusive release. "There's no reason 99 per cent of our game couldn't be played on a PS4 with a screen. It won't be quite as amazing as having VR, it really won't, but that's something we're thinking about at the moment. So I think that's a big decision devs have to make: at the launch of the hardware, do you support non-VR machines as well, or do you go balls-out VR-only and cross your fingers that there's enough sales to generate the revenue?"

That's assuming VR will take root this time around, of course. There have been several false starts over the years as ambition has outstripped technology. But with so many notable developers working on VR projects, have capabilities finally caught up with the vision? "I don't think there's anyone in the industry that can say for sure if this VR revolution will stick," Vella warns, "but after trying demos from the major players, I was pretty much blown away. And if that's the common experience, then they're starting off on the right foot."

Bithell agrees: "It feels like it's within grasp, and that the problems are solvable – all a Rift is really is a very cleverly repurposed iPhone. It feels good this time, but I'm sure people in the '80s were saying exactly the same thing!" ■



While still relatively bulky compared to something like Google Glass, the prototype headsets of Sony and Oculus represent the lightest and most compact VR tech yet. Both make use of internal accelerometers as well as external cameras to create near 1:1 tracking

FACE TIME

Should Facebook's acquisition of Oculus really be feared?

We quizzed our assembled developers on their reaction to Facebook's acquisition of Oculus, and all four were quick to dismiss as ill-founded the public concern raised by the move. Bithell sums up the general sentiment: "I hope that what we're seeing is a geeky fanboy throwing around some of the financial muscle that he's accrued on something that interests him personally. I think some people jump to a lot of conclusions based on the other areas of Facebook's business, but I honestly think it's too early to say. I have enough faith in the Oculus team, though, that I don't think they would have agreed to much evil."

Talking a good game

The burgeoning videogame commentary community on what it takes to cover eSports

When talk turns to eSports, the focus is largely split between the professional players who master the mechanics and the developers who make the games. But whenever a high-profile tournament is streamed on Twitch.tv or uploaded to YouTube, the action is framed by the commentator.

"One of my favourite examples is from a qualifying event for the Street Fighter 25th Anniversary tournament held in Los Angeles in 2012," says fighting game commentator **David Graham**. "James Chen and I were on the mic for the grand finals between Justin Wong using Rufus and Snake Eyes using Zangief. Rufus's character design usually lends itself best to playing offense, but that's tough for him to do against Zangief, so he's forced into a slower midrange game. That can be pretty boring to watch if you're not intimately familiar with it, but James and I love that kind of matchup, because it's about controlling space and limiting the opponent's options. We explained everything in great detail in a way that we don't usually have time for. Lots of people told us it was their favourite grand finals in quite a while."

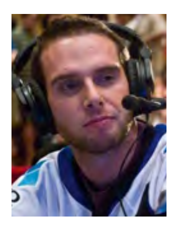
It highlights why commentators are so necessary. While fighting games rarely break the 100,000 mark in terms of viewership, *League Of Legends* holds the eSports record with a peak of over 8,500,000 concurrent viewers for the Season 3 World Championship. One of the English-speaking commentators for this event was **Joe Miller**, a former *Battlefield 1942* pro player who now works as a commentator and editor for eSports League (ESL) TV in Germany. "At the start, we'd broadcast audio-only streams to just a handful of viewers via a Winamp plug-in," he recalls. "Now we're working on the League Of Legends Championship Series, a broadcast that is filmed in a large studio with a full production crew."

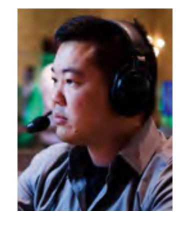
Miller is one of the fortunate few who's managed to turn videogame commentary into a full-time career. But while most commentators don't earn a living from their craft, that doesn't mean it can't open doors in other ways. "It's a great way to meet people, see friends and talk about videogames," Graham explains. "I have no intention of making videogame commentary a career. But it's helped me start a private law practice concentrating on entertainment and videogames. The people I've met while travelling for commentary have been vital in referrals and as clients themselves."

> "At the start, we'd broadcast audio-only streams to just a handful of viewers via a Winamp plug-in"

More games are being made with commentators in mind, too. "Riot Games added the Spectator Mode at a very early stage," Miller recalls. "This made our job easier and allowed us to be more informative. Showing the amount of gold earned by each team may seem like a simple addition, but it means we don't have to guess what state the match is in economically." It's not just *League Of Legends* either – the CODcasting utility in *Call Of Duty: Black Ops II* was a clear recognition of the streaming scene's growing importance.

Games that mimic real sports also affect how much commentary support is necessary. "Fighting games are behind other competitive genres," says commentator **James Chen**. "But to be honest, they don't need as much help. Everything you see on the screen is all the information you need as a commentator. It'd be cool to have a post-match screen with stats like the percentage of whiffed moves, but it hasn't been something we've felt was sorely missing."









From top: commenters David Graham, James Chen, Joe Miller and Riot's Leigh Smith

Over time, each game has developed its own style of commentary within its respective community, and yet **Leigh Smith**, a commentator for Riot Games, highlights the importance of knowing the possibility space. "*Supreme Commander* was by far the hardest to commentate, since there were so many ways a game could go from the very first minute," he explains. "*Battlefield 1942*, on the other hand, was easy to commentate [because] I was a top-level player and could cover every part of the match. *League Of Legends* falls in between the two, as it requires a ton of knowledge. But as a game unfolds, it becomes clearer based on each team's ongoing strategy and narrowing options."

No matter the game in question, the ultimate goal of videogame commentary is to reach the point where you never have to explain anything. "If competitive gaming ever gets to a point where it's as big as the NFL, NBA and NHL, commentators will be necessary as voices to be heard, much as they are on TV for national sports," Chen concludes. "Explanations would become less necessary. NBA commentators don't explain what the pick and roll is because they don't have to." Until competitive gaming reaches these viewership levels, commentators and developer support will continue to be instrumental in helping the fanbase grow. ■

Graham and Chen (AKA UltraChen) in their official capacity at the 2013 EVO World Finals, which took place in Vegas

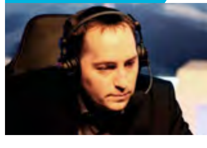
Kara Leung



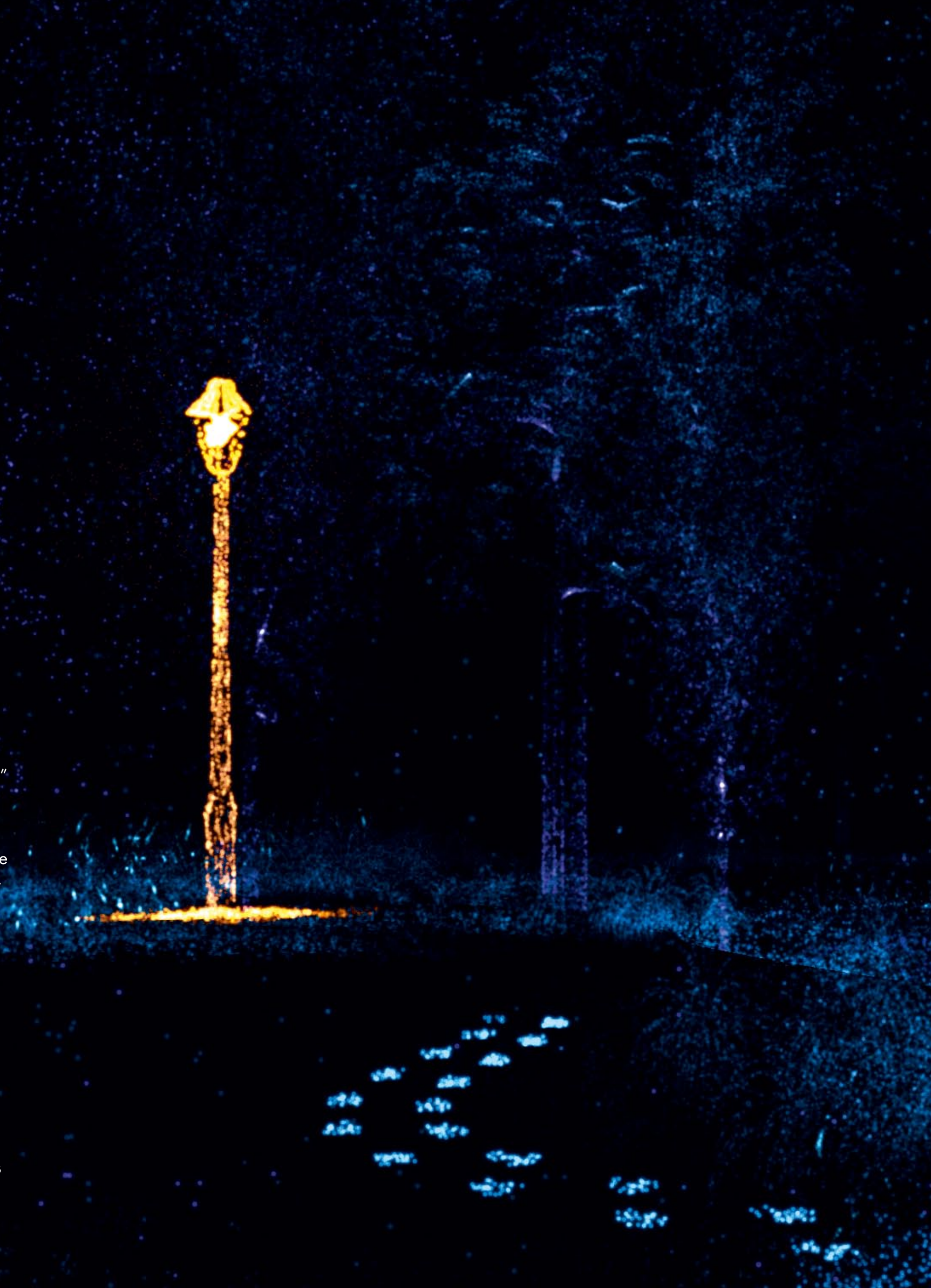
With over 100 different characters for players to choose from, assembling the knowledge base to commentate on a *League Of Legends* match (centre) is a feat in itself. With only two players to focus on, fighting-game commentators don't have to pan to find the action

REAL TALK

Leigh Smith offers his perspective on traditional commentating styles



"The general rule across all sports is to have one person, the play-by-play commentator, to relay what is happening along with historic data, building the story and giving background. An ex-pro player will also fill the colour commentator role [and] they convey the parts of a sport that the average viewer wouldn't recognise. There are possibilities to use two play-by-play or two colour commentators [instead], but only on rare occasions. For example, if it's really action packed then two play-by-play may be better, or if one of the colour guys can actually do decent play-by-play, then he might be better off with a pro player."



A LIGHT TOUCH

The art graduates asking players to join the dots

Sonar scans of shipwrecks, ambient doom metal and the work of philosopher Marshall McLuhan all number among exploration game *A Light In Chorus*'s many inspirations. That's according to **Eliott Johnson**, one half of the team behind it.

Johnson, who's based in London, is working with Oakland-based Matthew Warshaw. Both graduated in Fine Art from St Martins and now work in advertising CGI. As for the thinking behind their game, "We're interested in how cultures relate to their natural landscapes," says Johnson, "in their myths and stories, and how they're communicated through architecture and technology."

A Light In Chorus is somewhat reminiscent of *The Unfinished Swan*, if not visually then conceptually. The challenge is finding ways to navigate its beautiful point-cloud environment.

"Aside from being super pretty, making almost everything out of points leaves a lot of space for players to reinterpret what they're seeing," Johnson says. "Objects rendered in this style can be easily reconfigured into different shapes and states, which allows the player to author their own experience – at least partially."

The effect is beautiful, and profoundly eerie as disparate elements, such as trees, neon signs and carrion, shift in and out of focus depending on how you move through the world. It's a game that begs for further exploration, and we'll be delving deeper soon. ■



Players control a mass of particles that can assume the shape of objects you find. Doing so creates a memory of that object, enabling you to change into, for example, a rowboat in order to cross a river

Soundbytes

Game commentary in snack-sized mouthfuls



"Resident Evil… I like that film. The first one. You don't have to defend a guilty pleasure."

Film director **James Cameron** lets the Reddit community in on his favourite bad movie



"I think there's almost no way traditional displays will be around in a couple decades. **A VR headset is going to be much better and much cheaper."**

Oculus VR founder **Palmer Luckey** sees VR replacing TV, having never watched football down the pub



"They thought they would get a bunch of developers together and turn them against each other. **That's against the indie culture.** We all help each other out."

Indie **Adriel Wallick** spent one day enduring YouTube reality show Game_Jam before she and 19 other devs walked out

"What interested me about the project is that my voice could be connected to a game that's so hip and so hood. **It's associated with greatness."**



AP/Press Association

Snoop Dogg, performer of Doggystyle and face of Money Supermarket, on his role as announcer in *Call Of Duty: Ghosts*

ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game *Silent Scope: Bone-Eater*
Manufacturer Konami Digital Entertainment

Konami has rebooted '90s classic *Silent Scope* with a futuristic anime look that borrows from Appleseed and Ghost In The Shell. No surprises that *Bone-Eater* is currently confirmed for Japan only, where it recently underwent location testing in select arcades.

The premise remains the same: follow the action on the main screen, then snipe your targets through a second screen in the scope of a plastic rifle. Head, torso and limb shots are awarded letter ranks, and terrorists begin to retaliate when your first shot rings out. Health is replenished by spying on women through the scope, because unfortunately some things never change.

Arcade owners will be able to buy *Bone-Eater* in a stand-up cabinet or a luxury sit-down model we played at the location test. In the premium cabinet, the rifle is a robust chunk of plastic with a razor-sharp screen, and the main screen has two layers – as the action unfolds on a rear panel, crosshairs and HUD are imposed over the top.

The original *Silent Scope*'s central premise and gimmick cabinet are so naturally appealing that it still makes money at western arcades today, so it's likely *Bone-Eater*'s anime styling won't preclude a western release after it hits Japanese arcades proper in a few months' time.





My Favourite Game
Imran Yusuf

The game-savvy stand-up comedian on setting up his own development studio, virtual kittens and sweet revenge

Before his comedy career took off, **Imran Yusuf** worked for development studios such as Midway, Sega and Kuju. Now he's returning to his roots by becoming GamesAid's first patron. Ahead of his Edinburgh Fringe show, we chat about missing his old industry and the nature of videogame pilgrimages.

How did your appointment as GamesAid patron come about?
Before GamesAid, there used to be another charity called the Entertainment Software Charity, and I was looking to do some work with them, because I used to work at Sega. So I met with the people at ESC, and we wanted to do some stuff together, but sadly they folded. From Sega, I went to Kuju and got involved with some other stuff. And then finally, once I made some headway in my comedy career, I thought we could put on a night at the Comedy Store, and it worked. We sold it out last year and raised over £4,000.

Do you miss making games?
Oh, absolutely! I still keep in touch with people in the game industry. In fact, I was just speaking to [*Kick Off* creator] Dino Dini last night about how much I missed it. It was really hard work, and there were a lot of long days, but being in the industry – being around people that I enjoyed being around, talking about games and just working on them – it's just what I enjoy doing.

Would you ever consider returning?
Absolutely. What I'm wanting to do is make my fortune in comedy and then… I've already registered my own development company as a side project, just out of a desire of nothing more than to make games.

What sparked your interest in them?
When I was 11, I got a NES and I can still remember the moment I stuck in *Super Mario Bros* and heard 'Duh-duh duh duh-duh duh, duh'. At that very moment, my life changed and I went, "When I grow up, I want to make videogames."

How has your experience of working on games informed your comedy?
I've got a routine about playing *COD*; it's based on something that actually happened to me. Me and my mate were playing *COD* on Xbox Live, and these American kids laid into us when they heard our accent. It upset me a lot, because I was being insulted in my house – I'm a very sensitive guy! And so I wrote that routine off the back of the frustration that I felt. I was really lucky, because had I not received that abuse, I wouldn't have written that routine [and] it wouldn't have got me on TV. It was about that routine that Michael McIntrye went, "I really like that. I want you on my show."

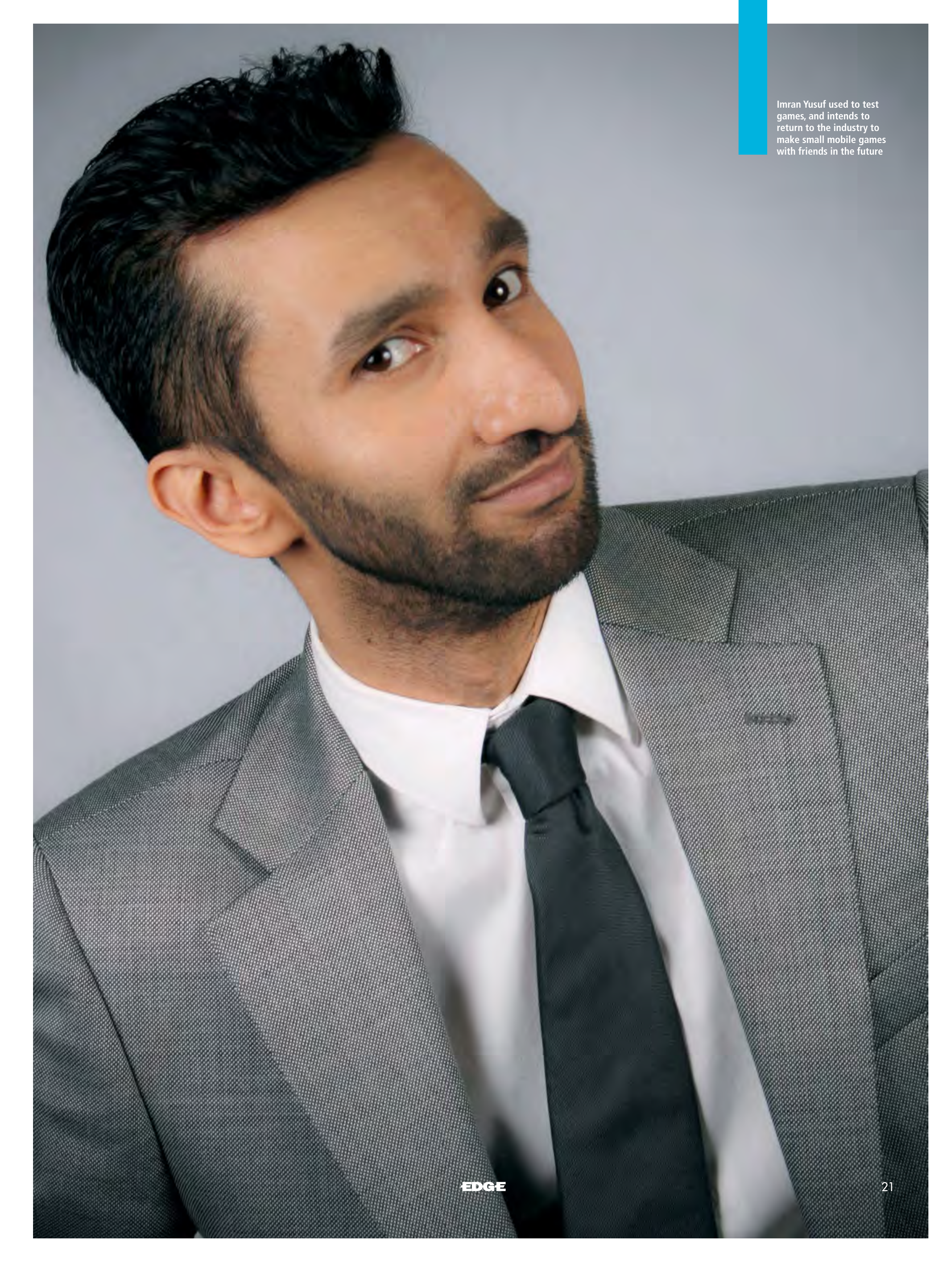
> "I was really lucky, because had I not received that abuse, I wouldn't have written that COD routine"

Do you think jokes about games have a broad enough appeal yet?
It hasn't been easy to write material about videogames that I can then approach a mainstream audience with. It's really weird. When I'm with my gamer friends, we can talk about games and [I can] make jokes about them they will understand, but I can't turn up at the Comedy Store and start talking about *Shenmue*! No one would know what the hell I'm talking about, unfortunately. There were a couple of times I've mentioned *Killer Instinct* or *Street Fighter* onstage, then people look at me and go, "What the hell is an Ultra Combo?"

So which game is your favourite?
I love *Shenmue*. I started working in the game industry at the end of 2000. I got a job at Midway. I did a good job in my first couple of weeks there and my boss – who had contacts at Sega – said, "Right, Imran, what game do you want from Sega?" I was looking forward to *Shenmue*, so he got it for me. I took it home, and I hated it. I thought it was absolutely cumbersome and I didn't understand what the hell was going on… After about a week, I thought I should give it another go and sit down with it properly this time. And then I fell in love with it. Just the amount of effort they'd put into creating the world and making it feel real. You *were* Ryo Hazuki and you had to find your father's killer by exploring the criminal underworld of Yokosuka, but at the same time you could feed kittens, buy soda, and race forklifts! When I went to Japan, I went to Yokosuka and visited Dobuita Street and took all these pictures. How many games are you so besotted by that you go and visit the place where it's set? ■

FUNNY GAMES
Imran Yusuf began his videogame career in the early '00s, working for Midway, Eidos, Sega and Kuju before taking a sabbatical in 2003 to focus on comedy. In 2010, he was nominated for Best Newcomer at the Edinburgh Fringe Festival, becoming the first performer in a free show to have been considered for the prize. The same year, Yusuf made his TV debut on Michael McIntyre's Comedy Roadshow, which included his routine about *Call Of Duty* antagonism. He hosted the second Stand Up For GamesAid comedy night last month, and is currently working on a new show for this year's Fringe Festival.





Imran Yusuf used to test games, and intends to return to the industry to make small mobile games with friends in the future

WEBSITE

Piper's Pokémon
www.bit.ly/1tKU50y

Much like the doodles she filled her page margins with at school, Piper Thibodeau's *Pokémon* speed paintings are a way to retreat from the stresses of work. Rather than maths problems or French grammar, however, she's now studying 3D animation at Montreal's Dawson College and currently working on a short film titled Sídhe, which she aims to finish next year. She's been reimagining Pokémon for over 500 days now, and the results are as charming as they are striking. Many of her images feature her subjects' various states of evolution, moving from heart-meltingly cute through to purposeful elegance. You can see more on her Deviant Art page, Cryptid-Creations, along with other videogame-inspired artistry, including paintings based on *Mario*, *Zelda* and *Journey*.



VIDEO

There's A Glow
www.bit.ly/1hTMNCi

If any further evidence were needed that videogames may – just possibly – be desensitising us to violence, then this is it. Johnny Agnew's video for the Interpol-esque band NO's track There's A Glow sees a digital version of singer Bradley Hanan Carter strut through *GTAV*'s Los Santos as chaos and explosions unfold around him. And all those pyrotechnics, even the bit where a garage forecourt goes up in flames, leave us curiously unmoved. But there's something fascinating about watching the music promo's clichéd excesses extrapolated to a videogame setting.

WEB GAME

Assaseed's Crin
www.bit.ly/1fVKGgI

Coded for the demake-themed Mini Ludum Dare #50, *Assaseed's Crin* casts you as "not so famous assassin" Altzio as he eliminates targets in Damascus against the clock. You have ten seconds to make your first kill, and each life you end will grant you another five. Accidentally take out an innocent bystander, however, and you'll be fined four seconds. Money you steal from each victim will automatically bribe guards alerted to your activates, and you can hide in hay carts or leap up to the rooftops to stay out of sight. Altzio moves with a pleasing sense of inertia, gradually accelerating the longer you spend moving in one direction. Get enough kills and you'll gain the ability to blend in, Towerjump and Haysassinate. It's a ferocious challenge, and considerably more exciting than its source of inspiration.



THIS MONTH ON EDGE

When we weren't doing everything else, we were thinking about stuff like this

FIGHTING STICK

Arcade Fightstick TE2

That Xbox One denies players use of their old peripherals is an offensive design quirk it shares with PS4, but it's hard to fault Mad Catz for meeting the unnecessary demand withits TE2 fightstick. It has, at least, remodelled the stick's housing with a flip-open lid for quick button customisation and cable storage, which feels almost like value for money until you notice it's missing a headset port and costs £50 more than the £130 360 equivalent. The high pricetag and the policy that necessitated its creation makes the TE2 a questionable value proposition, then, but the construction and world-leading components at least help its case. Mad Catz's fightstick remains the best in the world, but it still feels like something that no one should have had to create.



continue

PC *Dark Souls II*
FromSoftware atones for past sins with a beautiful PC port

Heads of Steam
Sony and Microsoft follow Valve's lead with heavy digital discounting

Unreal prices
UE4's $19 monthly sub sets out to level the dev playing field

Blue skies
Sunset Overdrive evokes Dreamcast-era technicolour lunacy

quit

PC *Dark Souls II*
Except for the HDMI bug that stopped us from playing it for a week

***Darkness* falls**
CCP's vampire MMOG is staked; 56 developers re-enter the job market

Uncharted waters
Naughty Dog's shedding staffers faster than Drake dispenses quips

Bungie push
Destiny composer Marty O'Donnell axed "without cause"? Hmm



www.twitter.com/edgeonline
Follow **Edge** on Twitter

TWEETS

People saying "VR has been tried before, and it didn't catch on, so it won't now" seem to be unobservant of how technology works.
Jonathan Blow @Jonathan_Blow
Developer, Braid

Game jam idea: MEMORY JAM. Challenge is to recreate games you played as a kid as accurately as possible, from memory ONLY.
Steve Gaynor @fullbright
Developer, Gone Home

I could never be too outraged about piracy -- I owe @RichardGarriott and @BillB for some 8 bit Apple games from my youth.
John Carmack @ID_AA_Carmack
CTO, Oculus VR



DISPATCHES JUNE



Issue 266

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins an Ear Force PX4 or Atlas headset from Turtle Beach Inc





Turtle Beach's **Atlas** headset (RRP £119.99) is compatible with 360, Xbox One and PC setups

Extra credit

Although I have been a subscriber for many years, I haven't taken the opportunity to write to you until now. I was inspired to pick up a pen (well, keyboard) by your new layout. I'm a big fan of **Edge**'s features, and so to find so many packed in a single issue was a delight, but I was even more excited to see the return of Time Extend! This kind of thing is exactly why I started buying **Edge**, so thank you for bringing it back.
And while we're on the subject of classic **Edge**, can I also take this opportunity to congratulate you on the recent run of bold, single-minded covers. They feel like a return to the days of the Girl Issue and that smashed-up N64 cover (though I'd like to point out that I chose to buy an Xbox One, and am very happy with my purchase).

The only thing I really don't get on with is the fact that James Leach is hidden away on his own at the back behind all the adverts – his columns always make me laugh, but I almost didn't realise it was there at all and assumed that he'd gone the way of the other columnists, who are no longer in the magazine.
Liam McCarthy

Of all the regulars that have appeared in these pages over the past 20 years, Time Extend was the one we've most often been asked to resurrect, so we're simply doing what we're told. If enough people want Nagoshi's whisky diaries to make a comeback, too, we'll even try to get him back on board, but no promises.

The modern Battlefield

In the Soundbytes section of **Edge** 266, you included a quote from [Oddworld Inhabitants co-founder and president] Lorne Lanning bemoaning EA's treatment of *Battlefield 4*. I couldn't agree with him more. I still have fond memories of whole evenings spent playing *Battlefield 1942*, and the journey I went on with Marlowe, Sweetwater, Haggard and Sarge in *Bad Company 2* is still with me. Hell, I even have warm recollections of the only good bit of *Battlefield 3*'s campaign before it becomes an indistinct trudge.

You'd have thought, given that game's litany of launch server issues, that EA would have learned its lesson about ensuring its studios have the time they need to polish things properly. But *Battlefield 4*'s launch has been even more disastrous, with all DICE's plans now on hold as it frantically tries to bail buggy water from its broken game. On Battlelog, it even says that it is "continuously" working on fixing the game. What a waste of talent.

"That shared experience will immediately be lost the second I stick a VR headset on"

EA's involvement even managed to somehow tarnish the work of the usually impeccable PopCap, with *Plants Vs Zombies: Garden Warfare* also suffering from server issues at launch and then even more problems when the first expansion pack was released. And many people, including myself, experienced issues with *Need For Speed: Rivals*. If EA doesn't stop putting shareholders before players, as Lorne says, it is going to find all the work it did to improve its reputation rapidly undone.
Andrew Latham

EA is far from the only culprit, but the likes of *SimCity*, *Battlefield 4* and *Rivals* certainly paint a picture of a company that needs to rethink the rush to get games out before they're ready to be stress-tested by thousands of players. But the culture of the continued patch job prevails, and it's unlikely to change in the short term.

Happy Trials?

Ubisoft has been crowing about the fact



that *Trials Frontier* has been downloaded over six million times in its first week on sale, which apparently makes it the company's fastest-'selling' mobile game, but I think it's a rather hollow victory.

I actually quite liked the game at first (and I should point out that I also like the mobile version of *MotoHeroz*), but then the spectre of microtransactions reared its ugly head and ruined everything. I'm the first to admit that I've spent a little too much on F2P games in the past (especially *Clash Of Clans*), but I don't really mind as long I feel like I'm thanking a game maker for an enjoyable time as opposed to being held up by a hurdle that requires me to pay. *Frontier* does the second of these things early on, and then, to add insult to injury, finds a load of other ways to block your progress just in case.

It's like the nagging feeling of guilt you get when you're browsing a shop that sells things you can't afford and the only other person in there is the sales assistant. Except *Trials Frontier* isn't even a particularly nice shop – it isn't even a patch on *Trials Evolution*, for instance.

Presumably, many of other six million people who happily downloaded *Frontier* for free will have rapidly come to the same conclusion as me, and given up on it feeling slightly betrayed by a series they trusted. It will be interesting to see the retention figures in a month or two (if Ubisoft ever publishes them), but I think they could learn a thing or two from Supercell.
Christian Hall

Soul food

Well, it only took three games, but the inevitable wave of *Souls*-inspired games looks to be beginning. First there was Capcom's *Deep Down*, and now we have *Lords Of The Fallen*. And all I can think about whenever I see footage of either of these games is how much I want to play *Dark Souls*. Capcom has added realtime co-op, and CI Games says that its RPG is more arcadey than FromSoftware's series, but the parallels are obvious.

Both games feature extremely tough, unforgiving enemies, and both seem eager to display their equivalents of *Dark Souls*' 'You Are Dead' screen often. Even the armour designs, with their mixture of ornate spikes, bright colours and tattered cloth, seem to directly reference *Dark Souls*.

I'm not so naïve as to believe that From Software's aesthetic is entirely original, and not informed by traditional elements from the broader fantasy genre, but it reinterpreted those ideas in a distinctive way. On first sight, *Deep Down* and *LOTF* fail to distinguish themselves in the same way, instead offering only a teasing glimpse at what a next-gen *Dark Souls* might look like, if not in terms of flair then at least texture resolution.

But my biggest concern with developers trying to capitalise on the success of the *Souls* games is the embarrassingly large number of hours I've sunk into them. If it becomes fashionable to make even the lowest-ranking enemies a very real threat, and the high-ranking ones all but insurmountable on first encounter, I'm simply not going to have enough spare time to embark on all of them! I think, then, I might just stick to New Game Plus for the foreseeable future.
Geoffrey Moore

Any popular game is always going to inspire a wave of tagalongs, but there's no need to fear that PS4 and Xbox One will become flooded with *Souls*-alikes. Forty- or 60-hour games are still far from the norm, after all, and, as you correctly point out, not every game that mimics FromSoftware will distinguish itself as *Souls* does.

Virtually yours

Don't get me wrong, I'm really excited about virtual reality, but I just can't see it becoming a mainstream thing (with or without Facebook's backing) while it still relies on huge, isolating headsets. My partner doesn't really play games, but he's usually happy to sit with me while I play anything with a narrative that he can follow. He'll even put up with my constant deaths in *Dark Souls*.

But that shared experience will immediately be lost the second I stick a VR headset on. In all the demos of Oculus Rift that I've seen, what the player is seeing is displayed onscreen, but even this is still too much of a disconnect – especially if the person is wearing headphones.

Given that VR, at least in its current state, is necessarily a solitary experience (at least in terms of people in the same room of you), it's difficult to see it thriving beyond technology enthusiasts until the wearable tech can be shrunk down to a more manageable size. Google Glass is an equally unnatural thing to adopt, but the key difference is that it's an ugly headset designed to augment your normal social interactions. Oculus Rift is an ugly headset that cuts you off from those around you. It seems ideally suited to big, expensive arcade machines rather than the home.

I'll still buy one, of course – I can't wait to play *Elite*, *Star Citizen* and, hopefully, *Half-Life 3* with it – but it certainly won't become my primary way of playing games until it also allows me to share them with other people.
Sam Barker

The need to place two screens just a few millimetres from your eyeballs is a prerequisite for the technology right now, and it's going to have a big impact on how certain types of games are consumed. But it's an issue that's on Sony's mind, hence the company's focus on creating 'companion' Project Morpheus content that is displayed on a traditional screen simultaneously. If it's a solution that stacks up, expect Oculus Rift developers to follow suit. In the meantime, let us know which flavour of Turtle Beach headset works best for you. ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

Recently, I had an illuminating Twitter discussion with some eminent writer colleagues and the lexicographer Kory Stamper about whether you should write 'videogame' as one word or 'video game' as two. I have long argued that the former is preferable, since these things are not just 'games' that happen to have a 'video' component, but a new fusion of genera that is more than the sum of its parts. After rummaging in some databases, Stamper told us that, though 'video game' is still more common in US English, 'videogame' is gaining ground globally. Excellent! But later I started thinking: could it be time to abandon the word 'videogame' altogether?

Think of all the damage the word has done. The uninformed think it sounds trivial and silly. Aficionados get sucked into the sterile stand-off between 'narratologists' and 'ludologists', or feel obliged to contribute to the millions of hapless words that have already been devoted to the attempt to define a 'game' – as if Ludwig Wittgenstein hadn't demonstrated adequately in his Philosophical Investigations that a single definition of 'game' that encompasses all the things we call games is impossible. It has also given us the unlovely derivative 'gamer', which doesn't even make sense by analogy to other artforms (if I read books, I am not a 'booker'), and also imports the unfortunate sense of 'to game' as in 'to cheat'.

Edge itself does not speak of videogames in its cover strapline but of 'interactive entertainment'. I've always admired this formulation as politely but polemically inclusive (yes, these things are entertainment as much as movies are), but it's probably too much of a mouthful for the everyday name of a whole medium.

Imagine you are sitting, as we currently say, playing a game, and someone asks you "What are you doing?" To say "Playing a game" would be the same kind of annoyingly uninformative answer as to answer "What are you reading?" with "A book". It also implies to most ears a certain kind of frivolity, despite thousands of references, in my own book Trigger Happy and ever since, to Johann Huizinga's argument in Homo Ludens about the cultural preeminence of play.



Illustration **marshdavies.com**

Could it be time to abandon the word 'videogame' altogether? Think of all the damage the word has done

More importantly, the description "I'm playing a game" today just fails to honour the amazing complexity and sophistication of these artefacts. When I recently spent several joyous hours with *Metal Gear Solid V: Ground Zeroes*, I wasn't "playing a game". I was sneaking through goddamn Guantánamo Bay like a gun-toting bandanna-wearing ninja and rescuing as many prisoners as I could.

So what about the term 'simulation'? It's not a new option, of course. Writers have long used it to denote various types of game, or to compliment certain games on their depth. But I think it's a more viable and accurate universal term now, with its connotations of complexity and the rigorous engineering of a modelled dreamworld, than it was back in the day when something like *SimCity* was a groundbreaking dynamic collection of interlinked feedback processes, or even further back, when *Elite* or *Lords Of Midnight* implied uncannily vast spaces. 'Simulation' is also usefully more general than 'simulator', which I take to mean an accurate-ish model of something that really exists (for example, a flight simulator). A simulation is just a computer-mediated world of any kind. Like a 'videogame', right?

Should we even continue to say that there is something central that *MGSV:GZ* and, say, *Candy Crush Saga* have in common? Sure, they are both 'interactive', but so is a website or a smartphone (and, in a wider sense, so is all art). Well, *Candy Crush* is a money-grubbing toy, a kind of elaborate computerised fruit machine, but it is still a simulation – of an invented mechanism. And *Ground Zeroes* or *Heavy Rain* or *The Last of Us* are simulations too, but of vastly deeper and more complex sets of nested mechanisms.

The desirable rhetorical difference, I suggest, is that calling them all 'games' or 'videogames' tends to drag the *MGS*es down to the level of the *Candy Crushes*. Conversely, calling them all 'simulations' pays due respect to the most sophisticated works, and issues a challenge to the littler ones to demonstrate greater formal ingenuity and beauty. It's not as though there is no precedent for changing the name of a young medium. Perhaps one day, the term 'videogame' will sound as antiquated as 'moving pictures', and then no one will have to argue about whether it's one word or two ever again.

Steven Poole's Trigger Happy 2.0 is now available from Amazon. Visit him online at www.stevenpoole.net



IAN BOGOST

Difficulty Switch

Hard game criticism

The history of videogames is also the history of televisions. Not the shows, the stars, or the ready meals, but the equipment – the box in your living room. This connection is the most intimate yet unexamined one in our medium. The 'video' in 'videogames' isn't just an affectation or a distinction: it refers to video technology, the recording and display system developed for cathode ray tube (CRT) televisions.

The earliest computer games didn't use televisions, but they did use devices similar to televisions. Willy Higinbotham's 1958 game *Tennis For Two*, often called the first videogame, was displayed on an oscilloscope connected to an analogue computer. Four years later, MIT engineers created *Spacewar*, a game that would inspire *Asteroids* and other space shooters. It ran on a refrigerator-sized PDP-1 minicomputer ('mini' relative to mainframes, that is) and rendered its ships and starfields on a display halfway between Higinbotham's oscilloscope and a modern TV. Like *Missile Command* and other early coin-op games, *Spacewar* used a raster-scan CRT display, one that deploys its electron gun to etch vector shapes into the screen's phosphor rather than to scan across the surface in rows as a raster-display CRT home television does.

By 1968, Ralph Baer had developed a working prototype of his Brown Box game system, which was specifically conceived to connect to an ordinary television. Its visual detail was rudimentary. In exchange for visual complexity, Baer brought videogames out of the research lab and into the home.

But there was a problem: nobody knew what to do with a contraption meant to be connected to a television. When Brown Box was commercialised in 1972 as the Magnavox Odyssey (the first home videogame console), the company had to explicitly inform consumers that the Odyssey would work on any brand of television, not just a Magnavox.

It's easy to forget how acclimated we've become to seeing the TV as a consumer electronics device used alongside a wealth of other gizmos that require wiring and coupling to one another. Our home theatres demand a receiver, which then connect to five, six or even seven speakers. Our Blu-ray players and streaming media devices and game systems create labyrinths of video and audio in the bleak dark of our entertainment cabinets.



Illustration marshdavies.com

Xbox One wants you to run your cable box through it, the latest in the endless, hopeless dream of convergence

But in the early days of Odyssey, even the VCR hadn't yet entered the picture. A television was either a big wooden box that sat stationary in a den or a small appliance set on a counter or a stand. Coupling a device like a video player or a game system to its display was awkward and unnatural. Early game systems connected to TVs as antennae, not as A/V equipment. To do so often required moving a large piece of furniture and risking an electric shock.

Those who remember having an Atari VCS or Intellivision may recall the RF switch boxes that facilitated switching between game and antenna or cable box. Playing a videogame involved communing with the television directly, reaching or scuttling behind it to gain leverage on the switch that transitioned the device from TV to GAME – and then repeating the process later when Dad yelled at you for forgetting to reset it.

We think we've moved beyond such inoperativeness today, but a spectre of incompatibility still hangs over consoles. Every new generation of hardware shows us how tenuously our TVs mate with our videogames as we haul out the old PS3 and replace it with a PS4, or realise that we want to keep both for a time but don't have a free HDMI input. Hardware transitions force us to perform an archaeology of dust and cabling.

In the den, videogame systems continue to answer the same question they have for four decades: what is my place here? And stalwart as ever, the television resists the videogame system, pushing it to the sidelines, downplaying its role in home entertainment to the status of an accessory, an optional feature of a device meant for sitcoms and reality shows and live sports.

Today, one improbable loner stands against this dismissal. Xbox One wants you to run your cable box through it, so it can control your television with the commands of your voice, incorporating TV programming as just another 'channel', the latest in the endless, hopeless dream of convergence. Such a dream is a bold one, but one that works against history. To succeed, it will have to upend a dirty secret of videogaming: that it is an activity conducted in spite of the television, rather than along with it.

Ian Bogost is an author and game designer. His award-winning A Slow Year *is available at www.bit.ly/1eQalad*


BIG IN JAPAN
SHORT PEACE
RANKO TSUKIGIME'S LONGEST DAY
JOJO'S BIZARRE ADVENTURE ALL STAR BATTLE
METAL GEAR SOLID V
GROUND ZEROES
DARK SOULS II
ANIMAX
THE ULTIMATE COLLECTION OF CONTENT
FROM THE LAND OF THE RISING SUN
STORE.SONYENTERTAINMENTNETWORK.COM
PS3



NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

Poor old Palmer Luckey. Overnight, the 21-year-old founder of Oculus VR went from the plucky kid who was going to change games forever to a loathsome sellout who had planned all along to hand the keys to the videogame industry over to whichever evil corporation could write the biggest cheque. Worst of all, he'd sold out to Facebook, meaning the most exciting thing to happen to videogames since the invention of the analogue stick was going to power VR social networking and firstperson *FarmVille*.

In the days following the $2 billion acquisition, Luckey, his co-founders and their family received death threats. Once again, the Internet did what it does best: jumping to the worst possible conclusion and enacting the worst possible reprisal. Luckey, to his credit, seemed to take it all in stride. He seemed more concerned about how the saner parts of the Oculus audience had reacted, and what little he has said since makes sense. The financial clout for custom components and large-scale manufacturing will help avoid the sort of scale issues that caused production to halt briefly in February. Oculus originally expected to make around 1,000 Rift devkits; last month, sales surpassed 85,000. Success was the dream, but never really the plan.

Unfortunately, Luckey's vagueness about the finer details of the deal has left a lot of room for doubt. He hints at a bespoke distribution platform, at improved developer relations and at Facebook letting him stay true to his vision without interference. That last part is the hardest to swallow, given the money involved, but even that has to be put in context – Facebook spent $19 billion on WhatsApp, after all, and has left it largely alone since. But until the specifics become a bit more, well, specific, doubt can thrive.

It's not that people don't trust Luckey, really. They just don't trust anyone. We instinctively find the involvement of a large, moneyed corporation suspicious, especially one whose business is built on the personal lives of hundreds of millions of people. Never



Illustration marshdavies.com

The involvement in Oculus of a large, moneyed corporation is something people instinctively find suspicious

mind the Federal Trade Commission-mandated tightening of Facebook's privacy policy in 2011, or CEO Mark Zuckerberg's criticism of NSA data gathering – these guys can only be up to no good. They're loaded.

Yet the same people who see only evil in all sides of this deal give up their money, data, free time and hearts to companies that are not only as big as Facebook, but are empirically more guilty of the crimes of which it is accused. Microsoft was a willing participant in the Prism programme, yet people fight for it on the forum battlefields in the great resolution wars of 2014. It's only a few years since Sony lost your credit card data and got several governmental slaps on the wrist because its security systems were bobbins, and look at how PS4's doing now.

Markus 'Notch' Persson, *Minecraft* creator and owner of one of the industry's jerkier knees, tweeted in the hours following the Oculus announcement that he'd cancelled a planned version of *Minecraft* for Rift because Facebook creeps him out. *Minecraft* is already available on platforms owned and run by Sony, Microsoft, Google and Apple, four of the biggest, richest and, yes, creepiest tech companies in the world. All have, in their own way, used their financial wherewithal to make gaming a better place, albeit with the odd bump along the way. There's no reason to believe Facebook won't, in time, do the same.

That point was made rather more strongly by Cliff Bleszinski, who continued his post-Epic Games focus on showing the world how successful he is with a blog post that strongly defended the deal. It also revealed that, as an early Oculus investor, he was about to come into quite a lot of money. When he's talking about Tuscany and calling Facebook's CEO 'Zuck', he's a hard man to side with.

Which just goes to show that it's all about messaging. Bleszinski spent too long toeing the marketing department's line and is now enjoying his freedom perhaps a little too much. Notch knows his fans and understands that an anti-corporate, pro-privacy stance will give the impression of a man who has his feet on the ground, rather than an impossibly large pile of money. Both have said all they needed and wanted to say. Luckey's coyness, however, has invited only suspicion, and until the Facebook-Oculus plan is publicly laid out, concerns will persist of a VR platform that can only be used if you log into Facebook and tell it which school you went to. How curious that when decrying a company that asks to know every little thing about us, we should insist upon exactly the same.

Nathan Brown is **Edge***'s games editor, and very aware his personal details are sitting in databases across the world*


THOUSANDS OF PLAYERS
ARE COMPETING ONLINE
Andre Gray
Gat3crash
Alex Lawless
Nexos71
Mark Cullen
PlayStation®Plus
Ed Scott
WHERE THE
PLAYERS ARE
Mark Tyler
Nightstar3
33%
JUST £39.99
A YEAR. JOIN US
PS4™



THE GAMES IN OUR SIGHTS THIS MONTH

34 **Landmark**
PC

38 **Quadrilateral Cowboy**
PC

42 **Borderlands: The Pre-Sequel**
360, PC, PS3

46 **Batman: Arkham Knight**
PC, PS4, Xbox One

48 **N++**
PS4

50 **Nosgoth**
PC

52 **Tomodachi Life**
3DS

52 **H1Z1**
PC, PS4

52 **Severed**
iOS

52 **Rise Of Incarnates**
PC

52 **Theatrhythm Final Fantasy: Curtain Call**
3DS

53 **Grid Autosport**
360, PC, PS3

53 **The Binding Of Isaac: Rebirth**
PC, PS4, Vita

53 **Dragon Age: Inquisition**
360, PC, PS3, PS4, Xbox One

53 **Freedom Wars**
Vita

53 **Sid Meier's Civilization: Beyond Earth**
PC

Explore the iPad edition of **Edge** for extra Hype content

Naming conventions



When we first saw *Landmark* (p34), it bore a rather different, and much more recognisable, name. Sony Online Entertainment pitched its rich world-building sandbox as a sort of alpha amuse bouche for fantasy MMOG *EverQuest Next*. Players would gather resources and build structures that could be sold to others or included, with credits, in *EverQuest Next*.

The problem with calling it *EverQuest Next Landmark* was that doing so shackled it to a single genre with a rigid aesthetic. *Landmark* is about so much more than medieval fantasy; its voxel-shaping tools can be used to make just about anything, yet its original title suggested to players that they had to make something specific. That's no path to success for a game with the potential to be named alongside *Minecraft*.

Names are important – an obvious sentiment to most, perhaps, but not all. *Batman: Arkham Knight* (p46) may be only the third *Arkham* game Rocksteady has made, but the studio's efforts to pitch the game as the closing part of a trilogy are hard to reconcile with the existence of Warner Montreal's *Arkham Origins*. No doubt Rocksteady would rather you erased that misstep from memory, but it does show the folly of slapping a recognisable name on a product it doesn't fit.

It's possible to go too far in the other direction, admittedly. *Landmark* may not be a name that fills the heart with wonder, but it's still much better than *Nosgoth* (p50). As it turns out, Psyonix's multiplayer *Legacy Of Kain* spinoff is currently as uninspiring in the hands as it is on the tongue. *Borderlands: The Pre-Sequel* (p42) is a fine name for an old-gen stopgap, but it, too, grasps for an association it doesn't quite pull off.

One game this month shows how it should be done, the two-person team behind *N++* (p48) having hit upon the optimal formula for naming sequels. Clearly, the art of naming videogames is about so much more than a colon, a subtitle, and some text on the spine of a box.

MOST WANTED

Super Smash Bros 3DS, Wii U
The character announcements keep coming, but concerns persist about this multiplatform instalment of Nintendo's arena brawler. Specifically, how 3DS's modest screen will handle tiered stages, and whether this can avoid the balance issues that dogged *Brawl*.

The Evil Within 360, PC, PS3, PS4, Xbox One
Tango's partnership with Bethesda has resulted in the kind of production values that a fully fledged Shinji Mikami game deserves. *The Evil Within* looks thoroughly unsettling, too, a welcome return to what Mikami does best.

Chroma PC
A multiplayer music FPS has no right to work, but few studios on the planet blend the sonic and ludic quite like Harmonix. *Chroma*'s about more than simply firing on the beat, too, with level scenery shifting abruptly – sniper towers rising, say – at points in the soundtrack.



LANDMARK

The ambitious sandbox aiming to map out the future of player creativity

Publisher | Sony Online Entertainment
Developer | In-house
Format | PC
Origin | US
Release | TBA

When *EverQuest Next* was announced in August 2013, there was some confusion about why a second game had been announced alongside it – particularly one that looked so much like its MMOG stablemate. *EverQuest Next Landmark* was pitched as some combination of a block-building adventure game, player content creation tool, and an MMOG in its own right. It was to be an opportunity for players to pitch in on the development of *EverQuest Next*, but its potential uses stretched far beyond its sister game.

Director of development **Dave Georgeson** is transparent about the fact that the name was confusing. Sony Online Entertainment chose to append *EverQuest Next* to *Landmark*'s title when it became worried that its fans would believe it had delayed development of its next MMOG to work on an unrelated *Minecraft*-alike. Developing *Landmark*'s underlying technology was essential for the development of *EverQuest Next*, and reflecting that in the title was meant to be a way to make the studio's intentions clear.

Landmark is not simply an *EverQuest* game, however, as its alpha release and rechristening show. Its voxel-based construction system is vastly more complex than the block-based systems it resembles at a glance. Your tools can be blocks, wedges, or spheres; you can resize, twist and manipulate materials before placing them; and you can use similar shapes and principles to delete matter you've placed. After that, smoothing and texture-painting tools can be used to add further detail.

The game's natural environments and the bumpy surfaces that can be achieved quickly using dirt, wood and stone make the system ideal for creating medieval-looking buildings. Indeed, the first thing you're likely to make will be a shack or castle tower. *Landmark* isn't intended to be a fantasy game, however: SOE wants players to branch out beyond the thematic remit of the *EverQuest* name.

A *Landmark* server is comprised of 50 procedurally generated islands, each roughly two square miles in size. When you begin playing, you're able to roam the entirety of the world in search of materials, but your building rights will be initially limited to a single patch of land. Despite this restriction, players in the alpha have already managed feats of architectural design that push at the limits of what the designers intended. In some cases, uses have been found for the game's voxel-shaping tools that exploit their programming to create new effects.

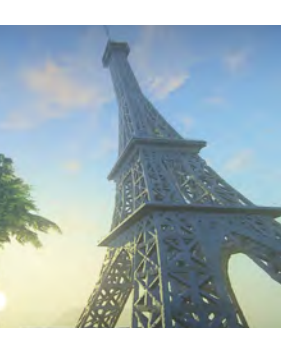
This might mean manipulating a quirk in the way that voxels automatically fill in negative space to create a massless 'zero



Dave Georgeson, director of development



Everything seen here was created by one player without using prefabricated parts. Once made, parts can be saved and copied to be reused elsewhere, though



SOE is pleased that players are already branching out beyond *Landmark*'s implied high-fantasy setting, but modern and sci-fi materials are a planned addition

voxel', a moveable absence that can be used to manipulate the shape of nearby voxels to create new patterns. Rather than close these loopholes, SOE is looking for ways to bring them more intuitively into the toolset.

"I work all day, and then I go home and play the game," Georgeson says, "learning what the players have done that day, what tricks they've discovered, so that I can go back to the team and make [*Landmark*] a better and better whole."

A few months of closed alpha time (the game is now in closed beta) furnished the *Landmark* team with more mechanical feedback than it can hope to stay on top of. In addition, SOE has committed to being as open as it can about its processes, and when new features will be delivered. The only exception is *EverQuest Next* itself, which is being made "behind the curtain" to avoid spoilers. Yet the community still has significant scope to impact the development of both games.

"There's a hundred thousand of them and there's a hundred of us," Georgeson says. "There's so many minds percolating the game, and that's what we're excited about. By opening up, we have all these other minds second-guessing what we're doing. That'll always end up resulting in a better product."

It's a straightforward rejection of the notion that the best games are made by small teams or auteurs. *Landmark*'s designers see themselves as much as toolmakers as content creators in their own right – the team's end goal isn't to realise a long-held vision, but to create a platform that other people will be able to take and run with. This is an assertive acknowledgement of the powers that are on the rise in PC gaming at the moment, from *Minecraft* through to the Steam Workshop and SOE's own Player Studio.

"When we recruited for this team, we recruited essentially egoless people," says Georgeson. "Creative, brilliant people who weren't wrapped up in the notion that it had to be their idea. What we want is a great entertainment experience. How we get there doesn't matter at all."

The current version of *Landmark* is a convincing proof of concept, demonstrating that SOE's ambitious voxel-shaping tools not only work, but can already be used to create remarkable things. The next step is to implement the game's survival features – combat and more substantial resource gathering, which will provide players with a reason to explore beyond discovering what their neighbours have been building.

NPCs within *Landmark* will operate according to an 'analogue' AI system that SOE is developing in conjunction with London-based AI consultancy Storybricks. Rather than scripting the actions of monsters or NPCs based on the presence of the player, the Storybricks-inspired system works by 'tagging' environmental objects as parts of a symbolic taxonomy that the AI understands. Areas might be safe or dangerous, rich or poor, and so on, and the behaviour of computer-controlled creatures will be moderated accordingly by a set of built-in preferences and motivation. In *EverQuest Next*, these systems will be designed by SOE. In *Landmark*, meanwhile, players will – within the confines of their claims – be able to experiment with the AI to suit their own purposes. This might mean establishing a town with merchants, or a dungeon with monsters to defeat.

> ***"There's so many minds percolating the game – that's what we're excited about"***

Players will eventually be able to package up all or parts of their builds and sell them to each another for real money via Player Studio. The AI system expands the implications of this idea: in addition to trading castle pieces and sculptures, players will be able to trade game design ideas, too. It's a wildly ambitious goal, aiming to fall somewhere between *Minecraft*, *LittleBigPlanet* and *Second Life*. Yet SOE's plan to pull this off is practical and grounded in a creative resource – players – that has the potential to yield results many times in excess of what a developer can achieve on its own. *Landmark* not only deserves to be thought of as it its own game, but may end up being much more important than the MMOG that it presages. ■

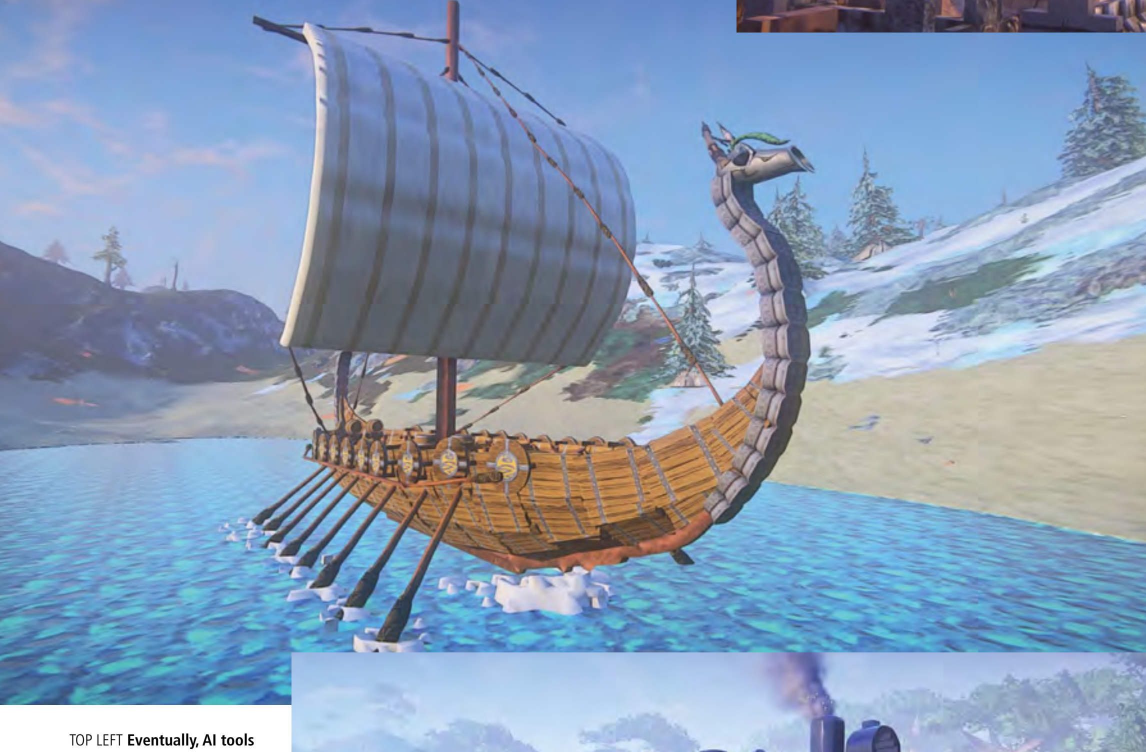


What next?

As with virtual reality, games are only one of the uses that could be found for *Landmark*'s technology. Given sufficiently advanced tools and a reactive enough world, the ambition of the game's developers is to approach something like the 'metaverse' of cyberpunk fiction. "I grew up reading William Gibson, Neal Stephenson," Georgeson says. "I'm an absolute believer in that end result. That's why we're giving [the player] all these tools. That's why we're not shutting down these loopholes. I joke all the time that this might be the last game I ever make, because I may never stop making this."











TOP **There are no tools in place at the moment to animate objects or make them usable by the player, so these planes are static. Again, such tools are something the developers plan to include in time.**
MAIN **This Viking warship is assembled out of pieces of prop furniture. It is similar, in many ways, to the sculptures players built using *Star Wars Galaxies*' housing system**



TOP LEFT **Eventually, AI tools will enable players to not just build cities, but populate them. Building adventures around these characters will be the next step of creation.**
RIGHT **This train's smooth edges and detailed wheels surprised *Landmark*'s programmers, who didn't believe it would be possible. The only prefab part is a forge, used to create the smoke from the chimney**



QUADRILATERAL COWBOY

How Brendon Chung is compiling his most intricate game to date

Publisher | Blendo Games
Developer | In-house
Format | PC
Origin | US
Release | 2014

You can thank **Brendon Chung**'s father for *Quadrilateral Cowboy*, the sixth full game made for release under the Blendo Games banner. A cyberpunk espionage simulation whose central mechanic involves typing code into a portable computer terminal might not suggest paternal inspiration, but Chung says his old man's fondness for manual labour was a driving force in the creation of a game in which you spend a lot of time outsourcing physical tasks with a keyboard.

"He did a lot of plumbing, carpentry, automotive work, electrical work and so on," Chung tells us. "Helping him out on these jobs made me infatuated with taking things apart and seeing what made them tick – what connects to what, how it all works together. I'd then try to put it back together, sometimes successfully.

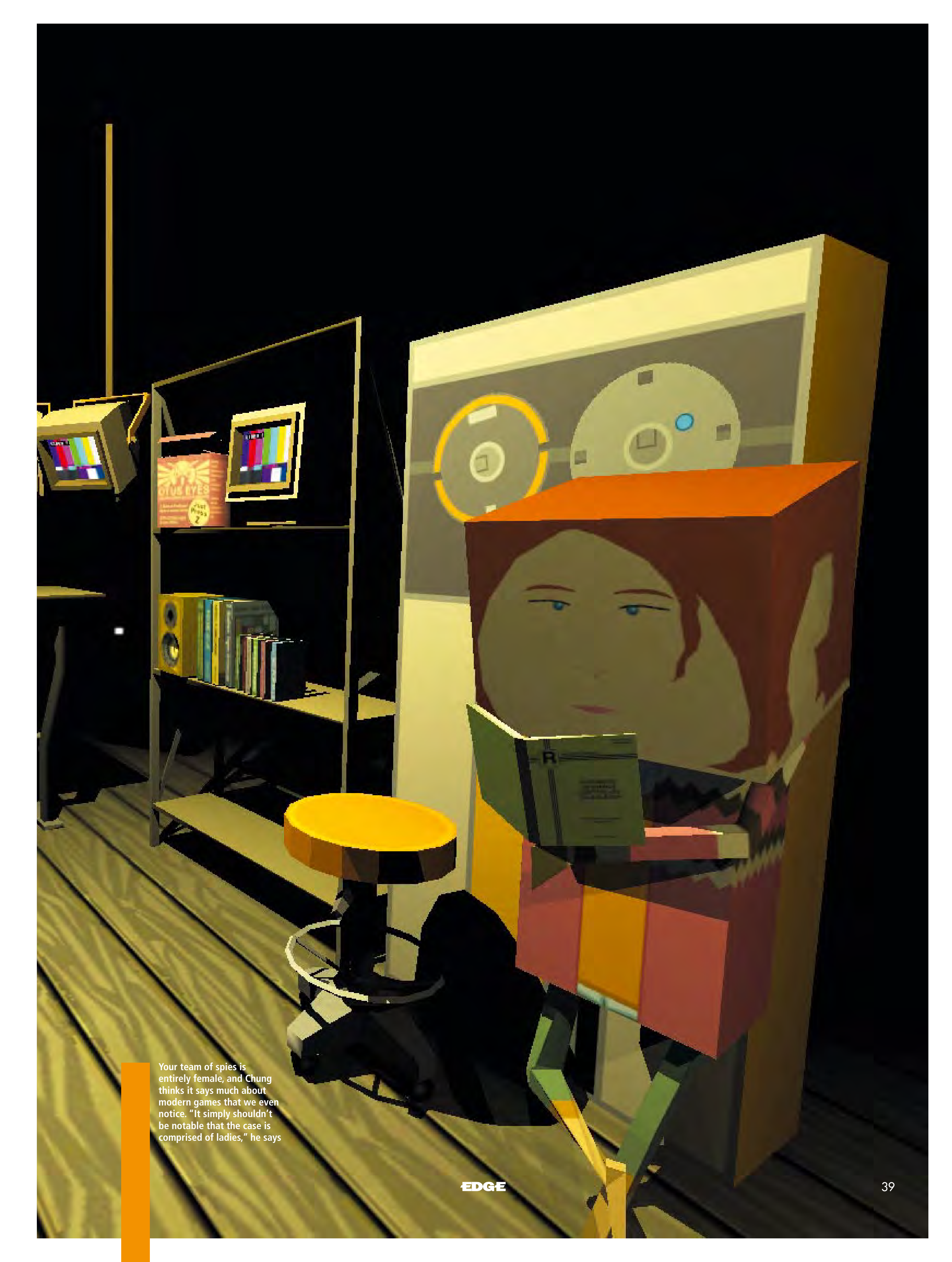
"That led to what *Quadrilateral Cowboy* is about: unpacking the world, seeing connections, figuring out how one thing relates to another, and using hyper-specialised tools for hyper-specific tasks."

Those tools, even in this development build, are many. A heavy-duty vice can prop open doors that are programmed to close within seconds. A power saw tears through grates and grilles. There's a robotic camera that automatically photographs classified enemy documents. And in the Weevil, you've got your very own recon drone. Each of those has, as Chung suggests, a very specific use: the saw can't cut through a door, say. The Deck, however, a chunky computer housed in a briefcase, is the most powerful tool in your arsenal, able to influence every computerised element of your target's security systems. You select it with a scroll of the mouse wheel, set it up in front of you, then type out strings of rudimentary code, with every keypress met with a pleasing mechanical clack. A command of 'door31.open(3)', for example, will open the given door for three seconds. Multiple commands can be strung together with semicolons, and a 'wait' command proves invaluable for getting in and out of rooms protected by a forcefield through which no computer equipment can be carried.

The Deck is the beating heart of *Quadrilateral Cowboy*, and not only in terms of its mechanics. Were the game set in modern times, it would be impossibly small and elegant – a smartphone or wearable device, perhaps. But *Quadrilateral Cowboy* opens on New Year's Day in 1980, and this is a thoroughly VHS-era sort of cyberpunk, a world where everything appears to be made out of cardboard and duct tape, music is played by wall-mounted turntables, and spies escape into the night on hoverbikes. ▶


Blendo Games' Brendon Chung


The Weevil is controlled by a bespoke coding language, with a monitor screen displaying its current view



Your team of spies is entirely female, and Chung thinks it says much about modern games that we even notice. "It simply shouldn't be notable that the case is comprised of ladies," he says



QUADRILATERAL COWBOY



Thirty Flights Of Loving was packed with references to everything from Disney's TaleSpin to Francis Ford Coppola's The Conversation. We're not quite sure where Chung got cattle-flavoured ramen from, however

"Tech nowadays is focused on being sleek and attractive," Chung says. "Part of me misses the ugly, clunky interfaces of past decades. I miss pressing buttons. I miss mechanical components, analogue tapes and moving parts. There's a tactile satisfaction in the click of a meaty mechanical button. *Quadrilateral Cowboy*'s visual and gameplay aesthetics revolve around that satisfaction, so the 1980s was the clear choice for the project."

That aesthetic applies to more than just the game world, which is just as well since you don't spend much time there. You're not carrying out missions in real time, but using a simulator, the HeistPlanner. Unusually for a Blendo release, it even comes with a tutorial of sorts, though instructions are presented organically, with controls on Post-it Notes stuck to your Deck and the protagonist holding up an instruction manual with the commands you need next to the terminal.

It all adds up to Blendo's most complex and systemic game yet, but it didn't start that way

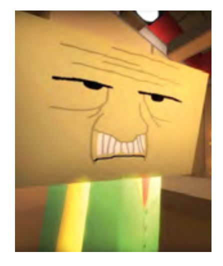
This is a philosophy that runs throughout Chung's output: "One of the principles I try to uphold is to respect the player. One particular way in which this manifests itself is [trying] to keep the player in control as much as possible. If the player moves the mouse or presses a button, the game should react. This means non-interactive elements, such as cutscenes and walls of text, should be limited or removed completely."

But while *Quadrilateral Cowboy* is clearly a Blendo game, it is quite unlike anything Chung has made before. You're not guiding just one protagonist through HeistPlanner, but several of them, each with their own set of abilities. Enginani has the power saw and door vice; Hacker has the Deck and Weevil; Greaseman can clamber up high ledges and sports self-explanatory Fast Boots. The Caser, meanwhile, can use NoClip to zip through locations at speed, marking out objectives and obstructions for those who follow. You switch between them using the function keys, and switching back to one who's already partway through the mission sees their actions replayed in fast-forward, the screen wobbling as if fed by a VCR on its last legs. And while a game based on entering lines of code into a computer terminal sounds, and often is, slow paced, there are moments requiring precise timing and speed of movement. Lasers, for instance, can only be disabled for three seconds before an alarm goes off.

It all adds up to Blendo's most complex and systemic game yet, but it didn't start out that way. Unsurprisingly, it began with just the Deck. "It fit the cyberpunk setting, it spurred players to be creative, and tapped into what I feel is a big joy of programming: empowering yourself through learning a new language. Once I got that feeling good, I said to myself, 'OK, what now?' Everyone has a different creative process. For me, it's about letting the game grow organically. It's Hell for anything resembling a production schedule, but giving the game that lovely feeling of spontaneity is well worth it to me."

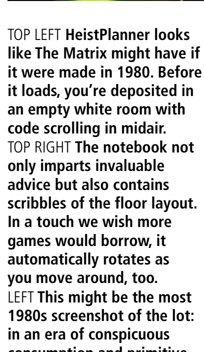
It has also meant that a game planned for release in 2013 now has no firm release date. Chung expects it to launch before the year is out, and to spend the final months of development expanding an already-sizable mission count and adding an asynchronous multiplayer mode. It's certainly been a very different project to the likes of *Gravity Bone* and *Thirty Flights Of Loving*, short adventures that were experiments in story first and mechanics second. Brendon Chung has never made anything like *Quadrilateral Cowboy* before, and that's precisely the point.

"I try to have all my games draw from a different genre," he explains. "There's a lot about game design I wish to learn, and what better way to learn than jumping straight into genres I have zero experience in? I'd never made a turn-based tactical game, so I made *Flotilla*. I'd never made a short-form firstperson narrative, so I made *Gravity Bone*. With *Quadrilateral Cowboy*, I decided to try my hand at the immersive sim genre to see where I could go with it. I'd like to someday make a driving game. I'd like to make a visual novel. These are genres that I really have no business in, and I suppose that's why I want to do them." ■



Console server

Platform holders have never been so active in their courting of indie developers, and given the esteem in which Chung's back catalogue is held, bringing his games to consoles could be lucrative. Yet here he is, making a game that can only be played with a keyboard. "I believe in making the best possible control scheme for a given platform," he says, "and not thinking about other platforms while doing that." His first two games, *Flotilla* and *Air Forte*, were on the Xbox Live Indie Games service, but it seems the return failed to justify the work he did on making the UI and controls controller-friendly. *Quadrilateral Cowboy* may not make it to consoles, then, but we'd take a *Gravity Bone/Thirty Flights* compilation in a heartbeat.



TOP LEFT HeistPlanner looks like The Matrix might have if it were made in 1980. Before it loads, you're deposited in an empty white room with code scrolling in midair.
TOP RIGHT The notebook not only imparts invaluable advice but also contains scribbles of the floor layout. In a touch we wish more games would borrow, it automatically rotates as you move around, too.
LEFT This might be the most 1980s screenshot of the lot: in an era of conspicuous consumption and primitive computer technology, why use just one screen when you could use eight?

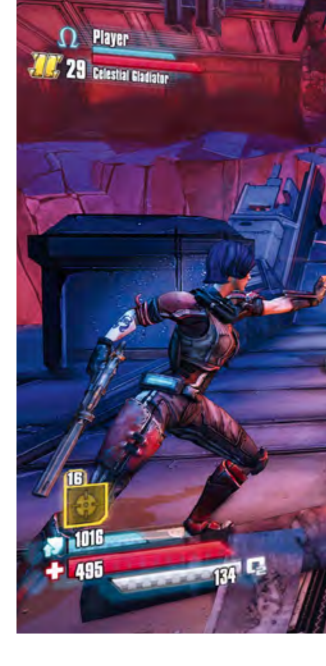


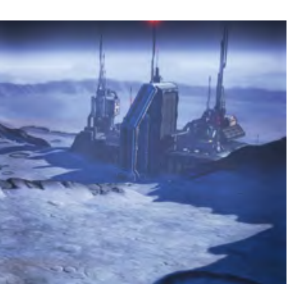


FAR LEFT While this will be the third Blendo release to use Chung's boxy character designs, it's a very different game. Chung has always worked alone, but is being helped by former *BioShock 2* designer Tynan Wales here.
LEFT The document scanner is a delightfully pointless bit of tech. This is a deliberately rubbish sort of cyberpunk, shown off in the low-res PC desktop used in menus



Publisher 2K Games
Developer In-house (Australia)
Format 360, PC, PS3
Origin Australia
Release Late 2014





BORDERLANDS: THE PRE-SEQUEL

There's more to 2K Australia's spinoff than its title implies

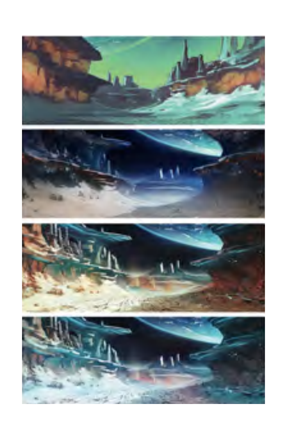
Borderlands is an exuberant series. From the theatrical size of its characters and their gloriously ham-festooned delivery to the uncountable permutations of weaponry, there's nothing modest about the world of Pandora. So the decision to call the third full-length game *The Pre-Sequel* is bewildering. 'Pre' is self-deprecating. It's corollary. It's less. *Pre-Sequel*, bluntly, screams stopgap. If the intention was subversion – something else at which *Borderlands* is normally quite brilliant – it doesn't come across.

It's unknown if Gearbox is working on a numbered sequel, but we do know it has handed over the *Borderlands 2* development kit and given 2K Australia free rein to make its own game, which is set on Pandora's moon, for old hardware. 2K Australia's past work is harder to pin down, the product of its brief and confusing life. It was created in 2007 when 2K's acquisition and character-sapping rebrand of Irrational generated two new studios: 2K Boston and 2K Australia. It became a subset of 2K Marin during *BioShock 2*, before re-emerging in 2011 to support *Bioshock Infinite*. If Irrational died, 2K Australia is a pretty perky fossil.

Studio head **Tony Lawrence** says his team intends to inject a little local flavour into the hillbilly tones of the series. An Australian-accented *Borderlands* is something that, for some reason, excites Randy Pitchford, who in recent interviews has even indicated that *Borderlands'* future might lie away from Gearbox, and that the studio behind the likes of *Duke Nukem Forever* is "too creative" to stick to making millions of guns. That said, it's hard to imagine it giving up creative control – and its pay cheque – until after it brings the series to Xbox One and PS4.



The Psychos have been given a pun-based makeover, transforming into Lunatics for *The Pre-Sequel*. They'll be equipped to take advantage of low-G environments



ABOVE ***Borderlands 2* was praised for its varied colour palette, so a landscape made up solely of grey rocks is out of the question here, with the barren surface packed full of cyans and purples.** LEFT **We've never been this close to the Hyperion space station before, which looms so large in the frame that you almost feel you could jump up and touch it**





Nisha is the face of another new gun-based class called the Lawbringer, and the Howitzer subclass could well belong to her. How does such a righteous-sounding class find itself serving evil?

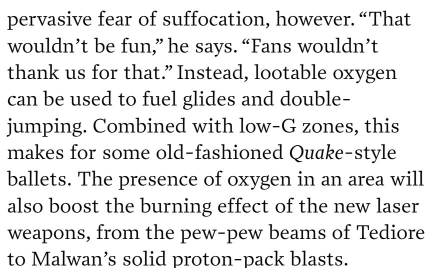


Gearbox Software's Randy Pitchford

There is cause for fan excitement, though: *The Pre-Sequel* sounds like a most-wanted brainstorm. It's the story of Handsome Jack, the pantomime villain who dominated the spotlight in *Borderlands 2*. He's a character whose puerile psychosis spirits into existence creatures such as Butt Stallion, a diamond pony too intriguing to not be introduced as a DLC character. Playing as Jack's four trusted lieutenants, *The Pre-Sequel* identifies his humanity – at the outset, he's just a man who loves order – then eliminates it.

This isn't just a straight-up tale of a morality flip, and all of the characters have their own dark trajectories. We've already met another character at the end of his life: Wilhelm, the mostly metal boss who summoned flying help in *Borderlands 2*. As we see him here, Wilhelm is augmented, but still mainly flesh. His active skill, as an Enforcer, is to summon defensive or offensive drone assistance. And as he progresses along the levelling path, you'll notice him leaving his species behind. Athena, meanwhile, is a character from the first game's General Knoxx DLC, a Crimson Lance Assassin who shares some DNA with Zero. But her active skill couldn't be more different from Zero's cloak, providing the series' first shield-based class. Think *Titanfall*: she combines the catch-and-fire-back Vortex Shield of the Titan with the double-jumping of a Pilot.

Those double-jumps are tied to the moon's mini-economy of oxygen. Lawrence is keen to distance the resource from a



pervasive fear of suffocation, however. "That wouldn't be fun," he says. "Fans wouldn't thank us for that." Instead, lootable oxygen can be used to fuel glides and double-jumping. Combined with low-G zones, this makes for some old-fashioned *Quake*-style ballets. The presence of oxygen in an area will also boost the burning effect of the new laser weapons, from the pew-pew beams of Tediore to Malwan's solid proton-pack blasts.

The second new weapon type, Cryo, adds a freeze-and-shatter process that's best pictured in conjunction with the butt slam. Performed while floating in the air, it's identical to a ground pound, with the difference that it has the word 'butt' in it.

At some points, what Lawrence feels he can tell us is at odds with what Pitchford feels entitled to say. Is Claptrap in the game? Yes. Is he the fourth playable character, as

It's the story of Handsome Jack, the pantomime villain who dominated Borderlands 2

suggested in a pre-alpha movie clip? No, no, you're thinking of Fragtrap – a militarised prototype. Then you hear Pitchford gush about the new playable Claptrap, and you realise we're pretty early in the PR process here, and maybe some people within 2K feel more constrained than others.

So why the decision to confine *The Pre-Sequel* to older hardware? Lawrence seems beguilingly self-fulfilling when he says it's a reward for the fans who have made the game such a success on those existing formats. Pitchford notes that *Borderlands 2* sold more copies than there are Xbox Ones and PS4s in the wild. Ignoring those people, for now, would be ridiculous. So *The Pre-Sequel* is an attempt to keep the *Borderlands* juggernaut in motion without robbing the inevitable *Borderlands 3* of its glittering novelty. It's the stopgap the subtitle suggests, then. But with a proven shooter formula, solid fan service, unanchored vertical low-G chaos and the genesis of Handsome Jack, it seems like precisely the stopgap people want. ■



Borderlands Infinity

The closing moments of *Borderlands 2* implied a future for the series that was neither contained by the world of Pandora, nor restricted in the number of vaults there were to hunt. Could PS4/XO support a more MMOG-style world? Publicly, at least, Pitchford wants to distance himself from talk of endless *Borderlands* sequels, emphasising the creativity of Gearbox. But the same financial considerations that have driven the release of *The Pre-Sequel* will also be guiding the studio back to *Borderlands*. After stellar sales and universal acclaim, hearing that he wants to make another *Duke Nukem* game feels like a masochistic form of optimism.



The story doesn't revolve explicitly around a vault, at least so far. But apparently there's a huge and sentient weapon that lives inside the moon. In a vault? Probably



THE NEW
PLAYSTATION® VITA
AVAILABLE NOW
SONY
Welcome Park
Group Messaging
Music
GOD OF WAR
COLLECTION
GOD OF WAR
GOD OF WAR II
18
www.pegi.info
AVAILABLE NOW
Also available on PS3
PS VITA



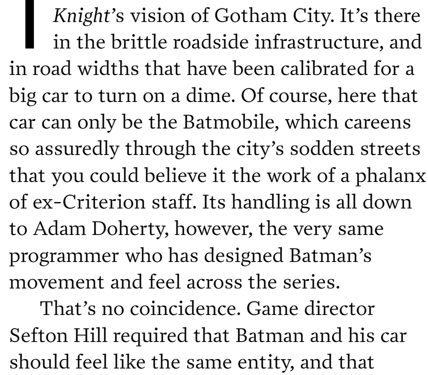
Simply download the Amazon app, click on 'search' and then use the 'scan it' option to buy
Scan & Buy
amazon
Available for Android, iPhone and Windows Phone 7
Find out More: www.amazon.co.uk/shopmobile
NOW WITH
OVER 300
GAMES
Party
PS Store
near
Trophies
Friends
Browser
SELECT
START
BORDERLANDS 2
INCLUDES 6
DOWNLOADABLE
CONTENT PACKS*
COMING SOON
IRON GALAXY
gearbox
2K
PS VITA
GOD OF WAR
COLLECTION
PS VITA
BORDERLANDS 2
18



Publisher Warner Bros
Developer Rocksteady
Format PC, PS4, Xbox One
Origin UK
Release October

BATMAN: ARKHAM KNIGHT

Rockstead y prepares for knightfall



There's something of *Burnout* in *Arkham Knight's* vision of Gotham City. It's there in the brittle roadside infrastructure, and in road widths that have been calibrated for a big car to turn on a dime. Of course, here that car can only be the Batmobile, which careens so assuredly through the city's sodden streets that you could believe it the work of a phalanx of ex-Criterion staff. Its handling is all down to Adam Doherty, however, the very same programmer who has designed Batman's movement and feel across the series.



***Arkham Knight*'s game director, Sefton Hill**

That's no coincidence. Game director Sefton Hill required that Batman and his car should feel like the same entity, and that *Arkham Knight* shouldn't simply feel like *Batman* with a driving mode. And so the Batmobile in motion looks weighty and unstoppable, just as Batman in the right hands can effortlessly advance through a brawl. It growls loudly and has the ground clearance of a supercar, clearly drawing from Christopher Nolan's snub-nosed, militaristic take on WayneTech. And despite its weight, it's fast and manoeuvrable, able to turn sharply to tear through Gotham's organic crush of elevations and alleys.

This time around, DC's infamous hive of scum and villainy has been designed around the Batmobile, and the city limits have been expanded to contain an area five times the size of the enclosed prison-state in *Arkham City*. That kind of space is both required for, and made manageable by, a speedy armoured car, but none of it would be possible without the power of new consoles. Producer Dax Ginn has spoken of the previous generation's trade-off between detail and size; shorn of the need to cater for ten-year-old specs, *Arkham Knight* promises to have both.



It will have a strong narrative focus, too. A quiet year has passed since the events of *City*, but now the filthy urban sprawl has once again been turned over to chaos, thanks to the threat of a chemical attack by The Scarecrow. Jim Gordon has called for an evacuation of the citizens, leaving criminal gangs – including those of The Penguin, Harley Quinn and Two Face, plus a shadowy new enemy created by DC and Rocksteady called the Arkham Knight – free to roam the streets.

With such a large beat to cover, Batman can now move and fight faster than ever. Rocksteady is evidently conscious of not wanting to tie you to the Batmobile's cockpit, but seems equally determined that using your new ride won't add a tiresome extra layer of management and animation cycles. So Batman can eject from behind the wheel into the air and enter straight into a glide, switching from patrolling the streets to prowling the rooftops in an instant. It works the other way round, too: you can call the Batmobile to you at any time and dive back into the driver's seat.

Bearing in mind Rocksteady's pledge to make you feel like you know this city as well as Batman, navigation could still easily be a mess of open-world busywork icons. But *Arkham Knight* will instead largely rely on the Bat-Signal, which will always be in sight in the sky, along with clear differentiation of districts for orientation. It's meant to help Gotham's organic detail and atmosphere, and your immediate concerns, come to the fore.

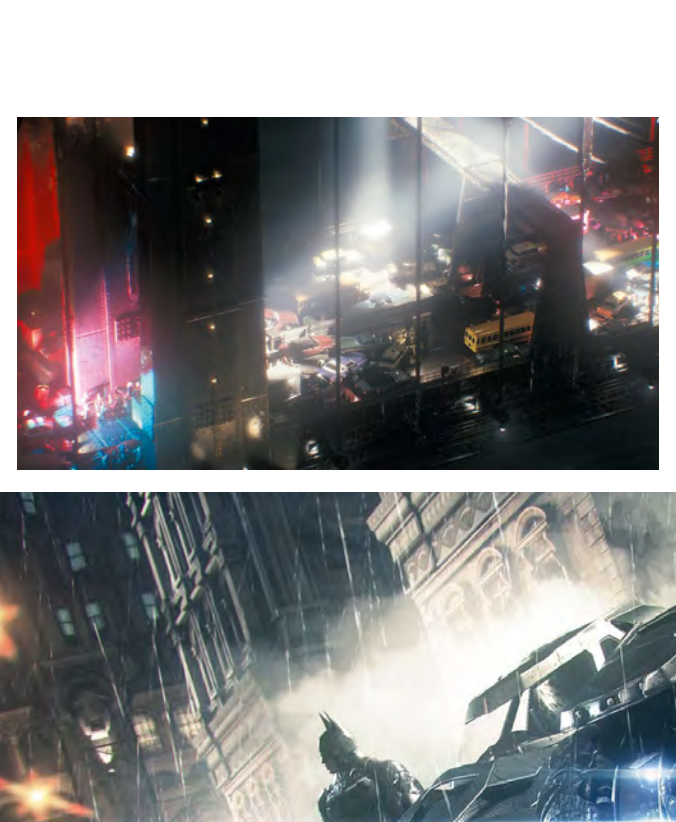
Gotham, however, will be filled with distractions, even if Riddler's new set of challenges feels a little less naturally entwined with the main game than we'd hope. He's somehow built a series of racetracks in the sewers and storm drains beneath the city. Each lap sees the course's traps reconfigure themselves, all providing a showcase of those driving dynamics, if not an obvious priority for a man with a city to save.

That Riddler's levels stand out at least shows how coherently the rest of the game fits together. Though the series has never felt as if it was missing a car, Rocksteady has made it indispensable in *Arkham Knight*. It seems that adhering to its principle of 'being the Batman' has paid dividends again. ■



How's my driving?

The notion of unleashing a high-speed tank on crowded alleys at night seems likely to break Batman's pledge never to kill within seconds of him taking to the streets. But Rocksteady is determined that *Carmageddon* isn't coming to Gotham. Although its streets are filled with gangs of thugs, you're not going to be able to run them down. They'll run at the sight of the Batmobile's brutally imposing profile, but hopefully not at the comically accelerated speed at which the original *Driver*'s pedestrians avoided collisions. Failing that, your car is armed with tasers, which will blast them out of danger should they collide with it.





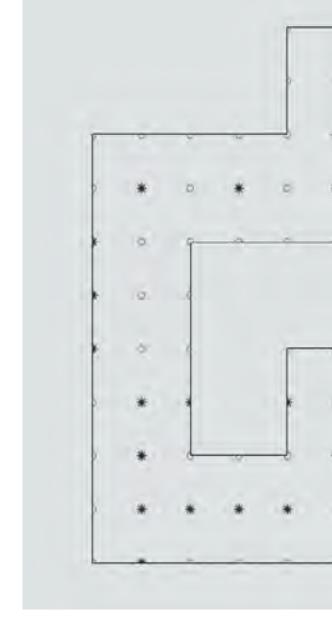


TOP **Rockstead claims that only the new consoles could provide the high level of environmental detail that an open-world Gotham needs.** RIGHT **Batman's suit has been remodelled to match the Batmobile. It's the result of his changing aesthetic and technical preoccupations, as well as Rocksteady's**

TOP **The Arkham Knight seems to be Batman's real nemesis in the tale, wearing a similar suit but armed with a gun. As a new character, little about him is known.** ABOVE **Two Face and Harley Quinn once again return, both having suffered during the events of *Arkham City* and eager for revenge.** MAIN **For all its tank-like appearance, the Batmobile has an animalistic presence, confirming your orders with a throaty roar of its engine**



Publisher/developer Metanet Software
Format PS4
Origin Canada
Release 2014





The ninja has been slightly remodelled, but its smooth vector-based animation and tendency to be blown apart in explosions remain totally true to the original game

N++

Metanet's remastered the way of the ninja

Can it really be ten years since the arrival of the original *N*? Back then, *N* was numbered among the vanguard of the Flash game wave, being a deeply nuanced, super-challenging platformer beautifully crafted in stark vector graphics by a fiercely independent developer.

Not much has changed, even though Metanet has since launched *N+* for XBLA and handhelds, and relaunched the original game last year for browsers as *N v2.0*. *N++* is true to its name: it's *N*, pure and simple, but there's lots more of it. "We were originally planning 500 levels, like in *N+*, but it's turned out at 1,000," says **Raigan Burns**, one half of Metanet, with something of a sigh. But he's sure that this is the last *N*. "It's the definitive one. We've made all the levels we can."

"Well, there are more levels that can be designed, but we'd repeat ourselves," clarifies the other half of Metanet, **Mare Sheppard**, seemingly mindful of both the appeal of *N++*'s level editor and the wisdom of crowds.

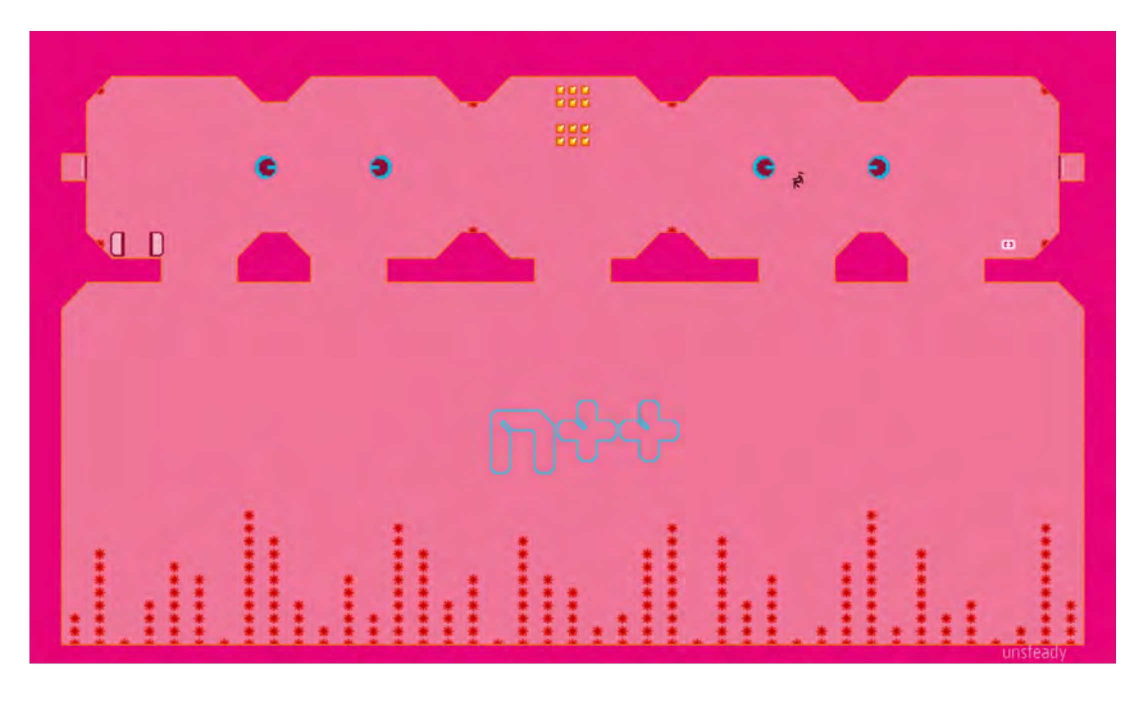
That such a simple premise can support not only repeated visits and releases but also thousands of different levels is remarkable. It's down to the feel of *N*'s ninja protagonist, who captivated audiences all those years ago in Flash with the fidelity of his movement physics. This is a platforming hero imbued with perfectly judged inertia and a floaty hop, able to pull off wall jumps and level-crossing leaps. Gravity counts, too: running up a hill is slower than sprinting down it, and hitting the ground too fast will kill, though you can use angled walls to help manage your velocity.

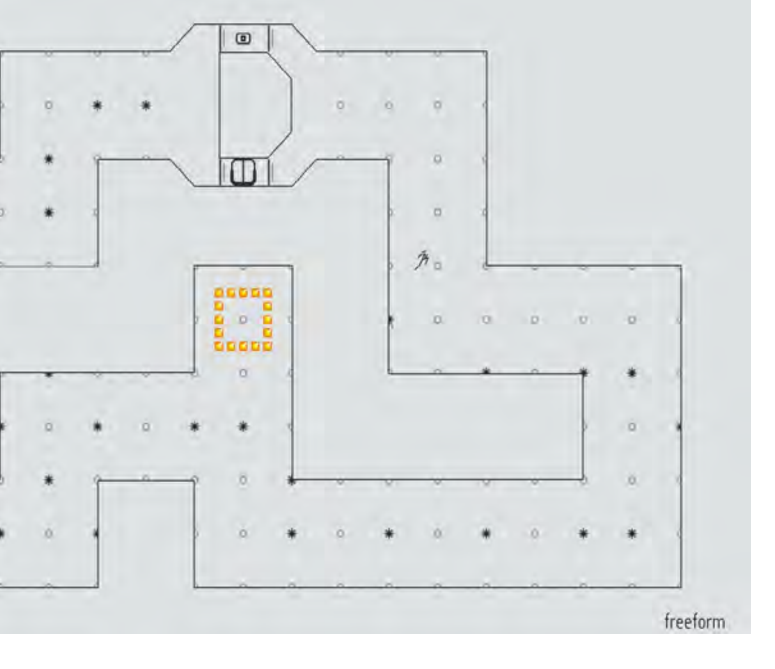
This finely calibrated toolset preceded *Meat Boy*'s by three years, and is the bedrock on which Metanet has assembled a lexicon of





ABOVE **Your ninja's inertia makes positioning mines at the top of small inclines a killer, while square bounce blocks, which depress like sponge when you step on them, require extra care to jump from cleanly.**
LEFT **The goal of each level is to get from the start point to the end, but usually you'll need to find switches to open the way, and these may send you on circuitous routes. The golden yellow dots fill your time meter; the greater the remaining time you have when the level's complete, the bigger your score for the level will be**





Here you must travel through the level, hit a switch and then make it back to the start. On the way, though, you'll have triggered several Toggle Mines, which you'll have to deal with on the return leg





Raigan Burns and Mare Sheppard, the two minds behind Metanet

different challenges: mines, switches to pull, bouncing platforms, patrolling enemies and heat-seeking missiles. Yet on PS4, the ninja somehow seems to control even better, perhaps down to DualShock 4's D-pad over 360's sub-par counterpart, or a keyboard.

N++ also welcomes a set of new enemies, each of which has opened the level design space out farther and farther. For example, there's the provisionally named Death Ball, a ninja-seeking sphere that can't be stopped by guiding it into the walls like other homing missiles. It's a creeping menace from which you can only run.

There are Toggle Mines, which are armed when you step on them once, reconfiguring safe locations into lethal ones. There's an unnamed enemy that was inspired by *Cursor*10*, the Flash classic that plays your previous runs in the level as cooperative aides. In *N++*, however, your shadows repeat your actions a few seconds after you start and place even more peril in your path.

"Some of the enemies are so fun that we had to stop to polish and explore them more," says Sheppard, who admits that they didn't originally plan to add any new enemies at all. Coming alongside that doubled level count, it's another hint of the reason why *N++* still isn't finished, despite the fact it was meant to be a PS4 launch game.

The duo has, after all, spent six months on *N++*'s menus. "We really care about menus and user experience," says Burns. "We get really annoyed when they're slow and unresponsive. You're not going to think they're the best menus, but it's [about] tiny little improvements."

The menus may not be the best ever, but they're finely realised, and an example of the fact that behind every aspect of *N++* lies deep craftsmanship by developers with years of experience. "There's an intangible quality to games that were made with love, which I hope comes through," says Burns.

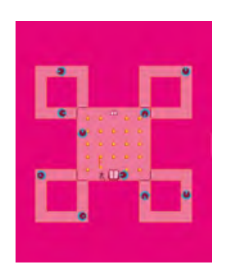
And just to prove the point, Sheppard switches the colour scheme of the punishing level Burns is playing (and frequently failing, gratifyingly enough) from a set of greys to acid yellow and a deep magenta. "The colours change your psychology, the mood – it's my favourite part of this game," she says, before explaining that she's experimenting with the colours that will ship with the game. The magenta scheme helps emphasise another new enemy that moves along walls and shoots a beam laser, which Burns is using cunningly placed level architecture to avoid.

> ***"There's an intangible quality to games made with love, which I hope comes through"***

He dies again. When *N* first appeared, its unforgiving difficulty level (and instant restarts) stood out, a shot of hardcore challenge in a softer landscape. But today we're in the middle of resurgence of hard games, forcing Metanet to reexamine what *N* is really about. "We realised that it's not quite a twitch game," says Burns. "It's hard to control – the inertia enforces errors where you try to execute your plan and screw up, but you don't always get immediate death, so you can try to improvise your way out of it."

"It makes it more rewarding, more skill-based," Sheppard agrees. "*N* was made in response to casual games; we like the games that make you improve and learn."

Metanet has improved and learned in the ten years it has spent making and extending *N*, too. The game's ultimate form might look familiar, but the sheer craft behind it makes *N++* already seem like its PS4 release will be nothing less than essential. ■



Design challenge

How do two people end up creating 1,000 levels? Sheppard and Burns both design whatever they want to see, with each level passing the quality test if both can complete it and find it sufficiently fun. When we meet, though, there are still some levels that not both of them have yet managed to finish in a single attempt, but rather in individual segments. Burns seems unruffled, since it means that they're theoretically completable, but we quail at the psychological damage that the difficulty of some of these levels will inflict.

The undulating line is the trail of the shot of a Sniper, a stationary enemy that targets you with a railgun. The effect is a nod to history, based on the visual design of *Quake III*'s railgun





Publisher Square Enix
Developer Psyonix
Format PC
Origin US
Release TBC



***Nosgoth*'s placement in the *Legacy Of Kain* timeline precludes the appearance of a familiar jawless face, though custom skins will invoke the earlier games**

NOSGOTH

Legacy Of Kain's PvP spinoff pits vampires against humans

Nosgoth is the multiplayer portion of a cancelled *Legacy Of Kain* sequel, spun out on its own and repackaged as a PC-exclusive thirdperson PvP shooter. It's free-to-play, and being developed by Psyonix, the studio responsible for the multiplayer components of *Bulletstorm*, *Homefront* and *Mass Effect 3*, as well as introducing *Unreal Tournament*'s much-vaunted Onslaught mode.

Still deep into its closed beta with no sign of a release date, *Nosgoth* is continually evolving. In its current form, it's a four-versus-four arena fighter set in small chunks of Nosgoth, the dark fantasy world in which the *Legacy Of Kain* series takes place. One team takes on the role of the vampires, each powerful brawlers capable of scaling buildings, leaping huge distances and gouging opponents to death with vicious melee attacks. The opposing team is made up of human rebels, whose weak and easily gouged bodies are mitigated by their comparatively advanced weaponry, which includes bows, hand cannons and grenades.

Each race is itself split into a number of classes. Humans come in the form of a bow-wielding sniper, a grenade-hurling support fighter, and a rapid-firing, crossbow-armed tank. There's even more variation within the bloodsucker ranks, with one vampire class capable of flight, another a sort of pale-skinned Incredible Hulk, and the last able to pounce on enemies from a distance.

The disparity in how each race can inflict damage on the other leads to a dynamic that ideally sees the humans huddle together to avoid being picked off as the vampires attempt to circle around and assault their prey from every angle. In practice, players expire and respawn with dispiriting regularity, largely based on who manages to outnumber whom in any given encounter, regardless of class choice or skill level.

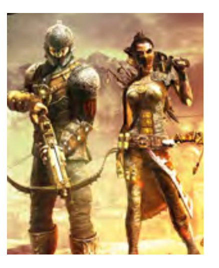
The different classes don't interact in any meaningful way, but the setup is such that the human characters seem like they should. There's no medic class in the current build, for instance, with health assists limited to the grenadier's healing bomb. The humans can also drop a mechanical turret that rather dumbly deals constant area-of-effect damage to anybody standing within a small and clearly marked radius, a tactically dubious weapon that is far too easily sidestepped.

The vampires, meanwhile, operate entirely independently of one another, whether they're flying around abducting humans and dropping them on each other, or shoulder charging through them. Throughout their roster of abilities, which includes the option to feed on the dead to restore health, damage doesn't yet feel properly tuned. Pounce on a human at full health and they'll disengage from you before they're fatally wounded. Drop one from the sky and they'll never be killed outright. Instead, encounters at the moment devolve into hitpoint grinding, leaving players feeling numbly impotent.

Two new classes will be added to the beta in due course, and though neither is yet playable, their abilities promise to add some spark to what is currently a bleakly unadventurous game. The first is a spy character similar to *Team Fortress 2*'s, and the second is a human blood mage capable of buffing and debuffing friends and foes. Both should go some way to remedying the concerns found in the basic character set.

Class customisation enables players to employ certain perks, skills and weapons, and it's here that *Nosgoth* plans to extract its keep. A premium currency will allow you to rent or unlock new weapons more quickly than they can be acquired otherwise, with Square Enix confident a fair balance can be struck for all.

Whether that's true or not may be moot if the core game continues to fail to inspire. *Nosgoth* is so unambitious in its current form that we expect many, even hardened *Legacy Of Kain* fans, will struggle to greet it with anything other than slack-faced apathy. ■



Humanity restored

You might not recall humans playing a huge part in previous *Legacy Of Kain* games, which primarily concerned themselves with the comings and goings of vampires. Under the ruling fist of Kain, humans had essentially been reduced to indentured plasma sacks, enslaved cattle bred in caves to fill the stomachs of a hungry population of bloodsuckers. *Nosgoth* takes place shortly after the fall of Kain, with the revolting humans taking advantage of the resulting power vacuum in an attempt to overthrow and eradicate their brutal masters. A metagame, War For Nosgoth, will tot up victories on both sides and award chunks of the map to humans or vampires.



Variants include explosive ammunition, faster reload times, and even all-new attack styles for the vampires. They're unlocked through regular play or by forking over cash



TOP **Humans are adept ranged attackers, but are woefully underpowered in close quarters. They can't regenerate health by sucking blood, so instead can inexplicably heal at altars.** ABOVE **Winged sentinel vampires are, according to *Nosgoth* lore, direct descendents of Raziel. They're capable of flying above the battlefield and grabbing players, but are themselves especially vulnerable to ranged attacks.** MAIN **Sunlight grenades can temporarily blind and damage vampires. Humans can also use grenades to lay down protective walls of fire**

TOP **Additional classes such as the debuffing blood mage and a disguise-donning vampire could give *Nosgoth* the variety and interplay between classes it needs.** RIGHT **The humans-versus-vampires staging doesn't pitch either race as morally superior. Deaths on both sides are visually gory, with vampires often exploding into showers of red gloop**

TOMODACHI LIFE

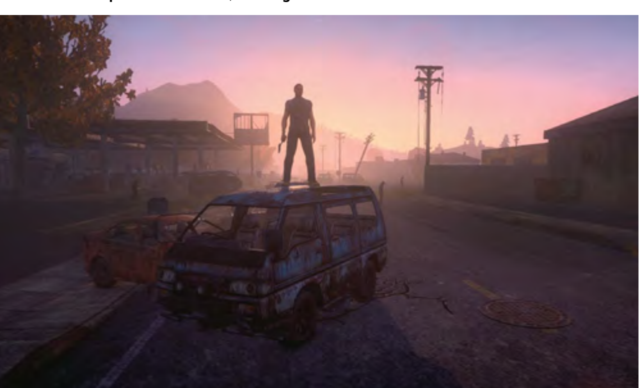
Publisher/developer Nintendo **Format** 3DS **Origin** Japan **Release** Out now (Japan), June 6



While *Tomodachi Life*'s inspirations are obvious – chief among them *Animal Crossing* and *The Sims* – this is not the work of a company recycling old ideas and resting on its laurels. Miis come to live on your island, and you work to keep them happy, then get to watch as they fall in love, marry and have kids, occasionally breaking into the odd musical number along the way. There's been a marked shift in marketing strategy, too, with an announcement trailer showing Mii versions of Satoru Shibata, Reggie Fils-Aime and Satoru Iwata battling for the attentions of Samus Aran. Perhaps Nintendo has been listening after all.

H1Z1

Publisher/developer SOE **Format** PC, PS4 **Origin** US **Release** 2014



Few big companies would confess to being inspired by an indie game, but Sony Online Entertainment president John Smedley openly admits *H1Z1* has more than a little in common with *DayZ*. At the moment, anyway; the longterm vision is for a vast, persistent world with thousands of players, where – in stark contrast to *DayZ* – zombies are a genuine, ever-present threat. A player-driven in-game economy will help further differentiate it from Dean Hall's sim.

SEVERED

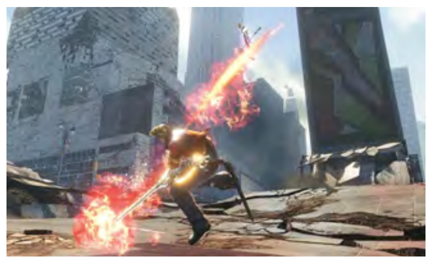
Publisher/developer DrinkBox Studios **Format** iOS
Origin Canada **Release** 2015



Guacamelee developer DrinkBox is using its signature style to power a firstperson iOS dungeon crawler. Swipe controls recall *Infinity Blade*, but there are shades of *Okami* in magic attacks performed by drawing shapes, and *Yaiba*, of all games, when you turn the limbs of foes into wearable weaponry.

RISE OF INCARNATES

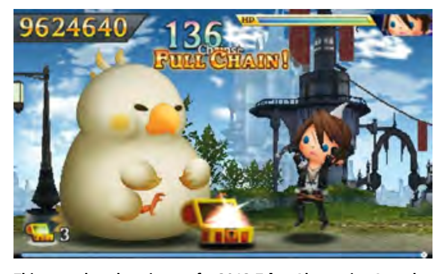
Publisher/developer Bandai Namco **Format** PC
Origin Japan **Release** 2014



Having made an F2P game out of almost all its established IP, Namco is turning its hand to something new. *Rise Of Incarnates* is a 2v2 online brawler made by the teams behind *Soul Calibur* and *Tekken*. *Anarchy Reigns* is a clear touchstone – here's hoping Namco has learned from Platinum's mistakes.

THEATRHYTHM FINAL FANTASY: CURTAIN CALL

Publisher Square Enix **Developer** Indies Zero
Format 3DS **Origin** Japan **Release** 2014



This sequel to the winner of a 2012 **Edge** Alternative Award for Most Awkward Title boasts an even longer name and an expanded song library. Expect three times as much music as its predecessor, double the number of playable characters, and a new multiplayer mode, Versus Battle Music Sequence.

GRID AUTOSPORT

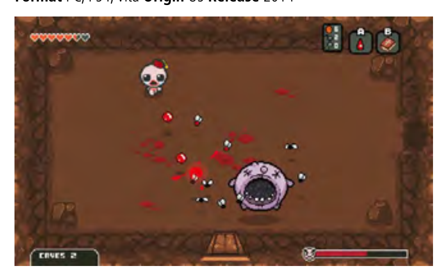
Publisher/developer Codemasters **Format** 360, PC, PS3
Origin UK **Release** June 27



Codemasters' core audience wasn't happy with *Grid 2*, and the studio is wheeling one more game for old consoles out of the garage in a bid to put that right. Cockpit and dashboard views make welcome returns, the handling model is more realistic, and *Grid 2*'s narrative focus has been pared back.

THE BINDING OF ISAAC: REBIRTH

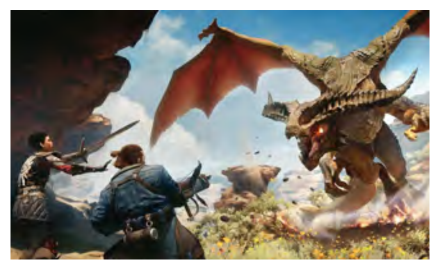
Publisher Nicalis **Developer** Edmund McMillen
Format PC, PS4, Vita **Origin** US **Release** 2014



McMillen's remake of his sick roguelike is nearing completion, with over 150 new items, local co-op and a new final chapter. While fans shouldn't come expecting OTT demonstrations of *Rebirth*'s more powerful host hardware, the switch from Flash does add one key feature: the ability to save and load.

DRAGON AGE INQUISITION

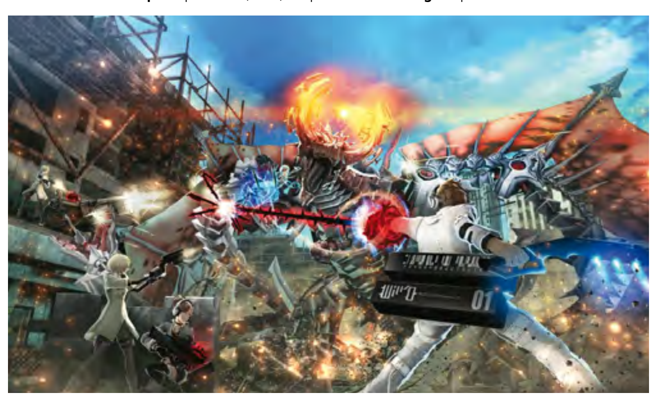
Publisher EA **Developer** BioWare **Format** 360, PC, PS3, PS4, Xbox One **Origin** Canada **Release** October 7



BioWare is certainly making all the right noises, promising more varied combat (a dragon's moveset will change if you hack away at a leg, for example) and an overhauled romance system. Most promising of all is a far more diverse world, in welcome contrast to *Dragon Age 2*'s endless bland cityscapes.

FREEDOM WARS

Publisher SCE **Developer** Japan Studio, Shift, Dimps **Format** Vita **Origin** Japan **Release** 2014



Freedom Wars tasks players with using big guns and extended air combos to complete missions and thereby reduce a million-year prison sentence imposed on them at birth. A collaboration between Sony's Japan Studio, *God Eater* maker Shift and *Street Fighter IV* developer Dimps, it's certainly got pedigree. There's support for up to eight co-op players online, as well as a PvP mode that splits players into 47 city states, one for each real-world Japanese prefecture.

SID MEIER'S CIVILIZATION: BEYOND EARTH

Publisher 2K **Developer** Firaxis Games **Format** PC **Origin** US **Release** Q3



A new *Alpha Centauri* in all but name, *Beyond Earth* takes Sid Meier's turn-based 4X strategy back into space. The futuristic setting doesn't just mean fighting on alien planets, however. Unlike *Civ*, which is shackled to real-world events, *Beyond Earth* will have an emergent narrative defined not by history, but the player's actions. The tech web is broader too, encompassing transhumanism, terraforming and xenoscience. Perhaps most exciting of all is how it has liberated Firaxis from *Civ*'s historically accurate unit designs. Instead, this will be a game where robot samurai face off against alien mecha in the far reaches of space.

#267



Explore the iPad edition of **Edge** for extra feature content

VIDEOGAME CULTURE, DEVELOPMENT, PEOPLE AND TECHNOLOGY

68

82

56

74

90

94

122

56 **Delirious**

68 **An Audience With... Tetsuya Mizuguchi**

74 **Boss Rush**

82 **Life After Death**

90 **The Making Of...** ***Katamari Damacy***

94 **Studio Profile: Bugbear Entertainment**

122 **Time Extend:** ***Red Dead Redemption***





Publisher Microsoft
Developer Insomniac Games
Format Xbox One
Release 2014



i o u s

Following videogames' grey generation, Insomniac's anarchic Xbox One debut is a riot of hypnotic colour

By Michael Gapper



The pitch hadn't gone well. "It started off with us cranking out MC5's Kick Out The Jams and ended with Drew [Murray] standing on a chair, acting out the entire game," creative director **Marcus Smith** explains. "We thought for sure that was it, that we were gone. Microsoft... Well, they kind of have a square reputation. No offence."

There were, says game director **Drew Murray**, "eight levels of Microsoft's hierarchy" in that meeting, and Insomniac's team left feeling deflated. Microsoft's squares surprised the studio, however. "We were a little nervous after the meeting," Smith says, "but they've been nothing but supportive of the vision of the game, the style and the attitude, and they're supportive of what we want to do. It's been awesome."

After a decade spent almost exclusively working on Sony platforms, Insomniac has defected. Every single developer at the Burbank, California, studio not working on mobile title *Outernauts* is making *Sunset Overdrive* for Xbox One. But if the team thought it was a dicey prospect, it's hard to say where the pitch might have gone wrong when the question *Sunset Overdrive* answers is so effortlessly and immediately intriguing: what if you gave Tony Hawk a gun?

Sunset Overdrive recalls the blue skies and punk rock of *Crazy Taxi*, the speed and style of *Jet Set Radio*, the grindable city of *Tony Hawk's Project 8* and the firepower of any Insomniac shooter. It's an open-world superhuman adventure in the mould of *Prototype* and *Infamous*, but your power is traversal – every wall can be run on; every ledge, mantled; every car and awning is a springboard; every rail and wire can be grinded indefinitely while firing on the armies of OD'd zombies prowling the streets of Sunset City.

These aren't the rotting undead seen in a thousand other games. "They're a disaster brought about by corporate greed," Smith says. "Fizzco is just weeks away from a worldwide release of a new energy drink called Overcharge Delirium XT. To celebrate, it invites everybody from its home town to sample it weeks before it goes on sale. Everybody in Sunset City is there having a great time. But you, the player, aren't having a good time, because you're working a shitty temp gig cleaning up at the party."

Sunset Overdrive's philosophy is that, for the right person, the apocalypse could be a thrilling escape from everyday life. Smith and Murray's previous game, *Resistance 3*, had them immersed in the dark side of the end of the world, a sombre dystopia where humanity scrapes by on the edge of extinction. "The prospect of going through another gloomy period of our lives didn't seem all that appealing," Murray says. "But we thought about the other side of apocalyptic scenarios, things like Charlton Heston driving around a whale of a convertible in the empty streets of LA in The Omega Man, or Will Smith hitting golf balls off an aircraft carrier in I Am Legend. One man's apocalypse is another man's *awesomepocalypse*."

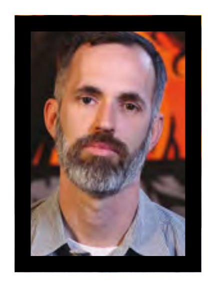
"So [you're working and] suddenly you're attacked by a reveller covered in orange glowing boils, and the city is quickly overrun by enemies that we called the OD'd," Smith says. "To make matters worse, Fizzco goes into cover-up mode and throws walls around the city, [then concocts] a virus story to keep people out. So now you're not only a survivor, but a prisoner.

"But then you discover something. You don't have that shit dead-end job any more, you don't have that boss breathing down your neck, you don't have bills to pay and there's nobody to stop you from climbing on top of buildings, shooting guns, blowing stuff up, cranking the music, or ▶

"We thought for sure that was it, that we were gone. Microsoft... Well, they kind of have a square reputation. No offence"



MARCUS SMITH
Creative director



DREW MURRAY
Game director



Many of *Sunset Overdrive*'s weapons are improvised, including the TNT teddy grenade launcher



ABOVE One Amp turns the hero's downward thrust into an explosive impact, made even stronger when combined with a powerful melee weapon such as the game's electrified sword. LEFT The number of OD'd Insomniac expects to place onscreen hasn't been finalised, but even in the early demo they move in numbers large enough to necessitate high traversal

ABOVE The game's art style was influenced by Gorillaz's On Melancholy Hill music video. "We were like, 'That looks cool. It would be cool to play a game that looks like that'," Murray says. RIGHT After death, the hero will respawn in whimsical ways. One sees them beamed down by UFOs, another has them thrown from the back of a van, and another still finds them emerging from a sarcophagus





living out your videogame fantasies. You can have fun in the end times."

Sunset Overdrive's open world is a series of islands with a full day-night cycle and a *Crackdown*-like degree of verticality. It's also a world laced with cables and rails built to keep you mobile high above the swarms of OD'd flooding the streets below. Hit any rail and you can snap onto it and grind indefinitely, or at least till it terminates. So while our objective in the substantial demo is a far-off radio tower, distances have a habit of shrinking in *Sunset Overdrive*.

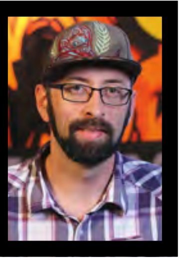
"Players can move at eight metres per second," senior designer and level design lead **Cameron Christian** explains. "I've been stressing metrics from the beginning. When we're working on a heavy combat space, we're going to have longer grinds, [and in a lighter combat space, we'll have shorter, trickier grinds]. It's all about reaction time."

characters, meanwhile, offer sidequests, which tend towards the ridiculous ("A zombie stole my comics!") and exist primarily to force players to traverse the city in ways they might never have considered.

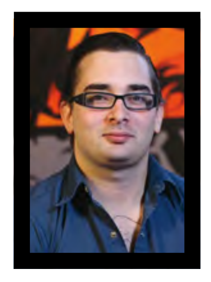
"I looked at [*Tony Hawk's*] *Project 8* a bunch," Christian says. "*Prince Of Persia*, *Jet Set Radio*… Once you start playing [*Assassin's Creed*] or *Infamous*, after a while you're not really thinking about the city any more. You're just like, 'I want to go there', and you head over there in a straight line, and you lose that connection to the space. We're trying to make our traversal a lot more thought-provoking.

"But from day one, we were like, 'We're definitely not having skateboards'. The rollerblade thing… Well, maybe for a moment [we considered it], but we just eventually went with sliding on rails and it worked. We didn't worry about the fiction too much."

"We reward you for traversing, we reward you for killing things, and we especially reward you for doing both at the same time"



CAMERON CHRISTIAN
Senior designer



GAVIN GOULDEN
Character artist

While it's possible to cross the city on foot, the safest route is just above street level, grinding on the telephone cables and crash barriers lining the city's roads. A tap of X will begin a grind or a wall run, while a tap of A when you hit a launcher will propel you over rooftops. As you run, grind and leap, your auto-aim becomes more generous, and your Style Meter grows with every kill you score. As you scale the city's towers, the grind lines become shorter and the opportunities for stylish play grow.

"We wanted to keep the street level the easy tier," Christian says. "You can move through the world at the ground level using basic grinds and basic bounces, but you start climbing higher and [you'll start] seeing more areas, more routes, faster shortcuts. We wanted the growth [and the challenge] to be in the world itself."

It's a world of factions – some you'll support and others you'll fight. There are friendly survivors in the city, building their fortresses and setting traps, or even taking to the streets to fight the OD'd en masse. Other

Never mind the hows of *Sunset Overdrive*'s limitless grinds or wall runs, or why every car is spring-loaded. There is, says Murray, no story explanation for either, beyond this being a videogame set in a videogame land. "It's a game that revels in being a game," he says. "One of our first mottos was, 'Fun trumps realism'. We don't need an explanation if it's fun; that's good enough."



Before you step into the world, you'll begin by creating your character – male or female, heavy or thin – and dress them from a vast wardrobe, starting with their underwear and working outwards, layering up clothes in a naturalistic manner. For *Sunset Overdrive* Insomniac has employed its first fashion designer, Carin Cronacher, to work alongside concept artist Vasili Zorin and character artist **Gavin Goulden**. The latter's previous work was on the character creator for *BioShock Infinite*'s cancelled multiplayer mode and DLC chapter *Burial At Sea*'s version of Elizabeth. ▶

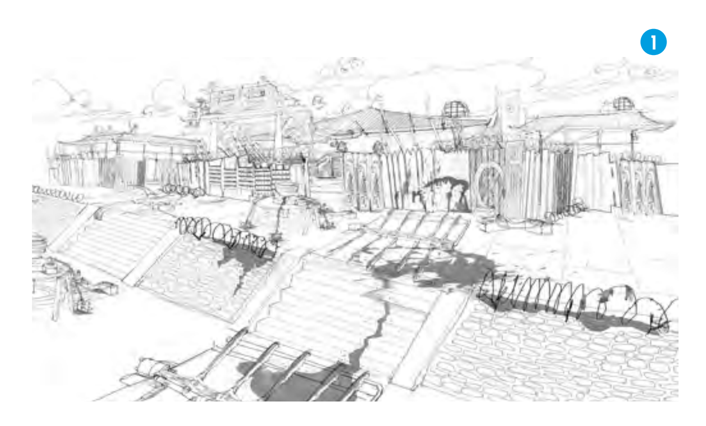
POST PUNK

The earliest demos of *Sunset Overdrive* were soundtracked by Adolescents, Black Flag and Misfits, the music Murray and Smith grew up with. "But we started to realise '80s hardcore is too fast," Murray explains. "The cadence is too fast. You would want to hit the button at a certain beat, and you always felt like you were offbeat. It felt like it wasn't really flowing.

"Over time, we started to experiment with the types of music, and got a little more into contemporary bands such as DZ Deathrays from Australia, or Bass Drum Of Death, or FIDLAR. They fit the themes really well, because they bring that kind of punk ethos without the baggage of smart punk – the Dead Kennedys of the world, who have an agenda. These guys are just, 'I want to drink beer and be loud'. It's not as goofy and throwaway as, say, Kiss, but it just fits so well with our setting. The excitement and energy and the fuck-you attitude of listening to [Charged] GBH is still there, but it's a bit more accessible."

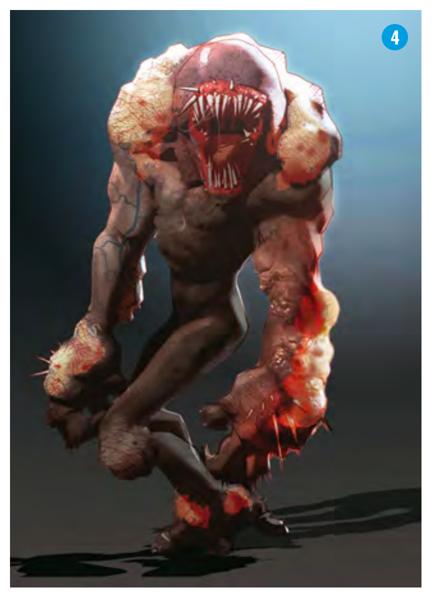


The sentry turret is a handgun suspended from a helium balloon









1 Each faction's HQ has been turned into a fortress with spike traps and barbed wire. The 'adult adventurers' – definitely not Scouts (registered trademark) – have occupied Little Tokyo's Japanese heritage museum. 2 Shop fronts are covered in detailed signage, each one touched by the hand of Insomniac's writers. 3 Some heavyweight OD'd have absorbed machinery into their bodies. 4 The standard swarming grunt of the OD'd army explodes into a fizzing pool of Overcharge when killed. 5 The traversal systems emerged after the game was approved, and the art of Sunset City changed to reflect the demands of the new systems, including grindable cables and surfaces built for wall running. 6 The work of UK design firm I Love Dust informs *Sunset Overdrive*'s overall style



COLOUR COMMENTARY

"The colour delivery turns up once a week," art director **Grant Hollis** jokes. "Constant colours come into the studio." Insomniac didn't have that problem with Hollis's previous game, *Resistance 3* – "Someone on YouTube wrote a song about how brown it was," he remembers – but *Sunset Overdrive*'s style demanded some changes at the studio.

"Initially, we had every colour in the rainbow and that was a problem," he says. "Our other art director [Jacinda Chew] wanted the islands to have a more unified look – just a little hint of something to help unify it. So we [desaturated] those colours a little bit and popped the effects and enemies forward, so that you're the foreground, the enemies are the clear middle ground, and the background is the environment."

Insomniac has also partnered with UK design studio I Love Dust to work on some UI elements, concept art and in-game graphic design. "We wanted the graphic design stuff to look… not grungy, but more 'I don't give a shit'. It's really hard, because I'm a classically trained graphic designer, so for me not making straight lines is really hard. It's like, 'Draw it with your left hand so it's not perfect'. It's a very distinctive style."



“It’s funny, because in *BioShock* [Elizabeth] was 40,000 [triangles],” Goulden says. “And even though it’s a much busier world, the shader support is more sophisticated, all the cloth is physics-enabled and it even wrinkles when you move, basically every character in *Sunset Overdrive* is 40,000 [triangles] too.”

It’s the nuances of the costume work that will differentiate players in the multiplayer mode teased in last year’s E3 trailer. “Given the opportunity, my daughter will dress and act like a crazy person at every opportunity,” Murray says. “And I find myself saying, ‘No, you can’t go to school looking like this’, and the only reason I can give is, ‘You’re going to be judged’. But what do you do when all the rules are gone? Does it degenerate into Lord Of The Flies, or does it become something like Burning Man, where self-expression is paramount?”

Further self-expression comes in the form of Amps. Amps can be crafted from Overcharge and applied to one of your three character Amp slots, or to your gun’s single slot, activating insane superpowers as you push your Style Meter higher. “We reward you for doing cool things,” Smith says. “We reward you for traversing, we reward you for killing things, and we especially reward you for doing both at the same time.”

As the Style Meter climbs, your Amps fire up; one character Amp in the demo turns every evasive roll into a human fireball, while an Amp applied to the default machine gun gives every bullet fired a small chance of exploding like an atomic bomb. Guns are, after all, Insomniac’s stock in trade.

“The biggest thing we’re trying to do is get back to some of the things we had with *Ratchet & Clank*,” explains lead gameplay programmer and weaponsmith of sorts **Doug Sheahan**. “The big thing is giving players the ability to build different strategies out of their eight chosen weapons.”

As for those weapons, there’s a Roman candle firework launcher that indiscriminately sprays missiles with barely a hint of accuracy, the standard AK machine gun, a fire-extinguisher-powered teddy bear grenade launcher, deployable hover-turrets, a flame-throwing shotgun, the ‘Captain Ahab’ harpoon, a vinyl-record-flinging disc launcher, and a dozen more, all of which can be modified with one of many different Amps to change their effects. The machine gun can be Amped with ice ammunition instead of its infrequent thermonuclear rounds, say, but what happens when those same effects are applied to sentry guns during a siege or to the wildly inaccurate firework launcher? There will be, says Murray, many more Amps to craft for both characters and weapons, and their applications will be unlimited, leaving room for you to discover combinations and fight in your own way.

“What I consider success with our weapon array is when you can go to any person and say, ‘Pick eight weapons you want to put in your weapon wheel’, and everyone picks a different combination,” Sheahan says. “You can’t make everybody happy with every single gun, but if we can make everybody happy with half of them, we’ve done a pretty good job.”

“I think, over the past few years, we’ve really begun to truly understand what we love the most,” Insomniac’s CEO **Ted Price** says. “I think that’s reflected in the tone of *Sunset Overdrive*, with its humour, irreverence, stylised visuals, weapons: those are the elements that people come to Insomniac for. We’ve done darker games like *Resistance*, but this is where we shine.”

“We’ve really begun to truly understand what we love the most. I think that’s reflected in the tone of Sunset Overdrive”



Traversing Sunset City is as much about engaging with the OD’d and hostile humans called Scabs on your terms as it is about the rush of sheer locomotive freedom. By the time you climb that once-distant radio tower, launching from “bouncies”, as ▶

DOUG SHEAHAN Lead gameplay programmer



TED PRICE CEO



GRANT HOLLIS Art director

MICRO SWITCH

Until *Outernauts* and *Fuse*, Insomniac’s games lived exclusively on various flavours of PlayStation. “Working with the console manufacturer is something we’ve done before and we know it’s a great opportunity to introduce a brand-new IP, especially one taking creative risks,” CEO Ted Price says. “It was really refreshing to see [Microsoft’s] enthusiasm and acknowledgement that we were trying to do something different, tonally, from where most games are going.”

“When we worked with Sony, that made it easier, because we were focused on that hardware. With *Sunset Overdrive*, it’s the same thing,” says Marcus Smith. “It makes it easier for us to focus on the one thing and tap the hardware in a way that we probably couldn’t if we were crossplatform.”

But that doesn’t mean Insomniac is having an easier time developing for Xbox One than any other thirdparty. *Sunset Overdrive* is, for now, another sub-1080p game. “We’re still working on optimising and we’re going to continue to do that,” Price says. “We can get into all the technical stuff later. This is going to be a [question] for every game that comes out. People will be counting pixels. For us, it’s about the vision: you saw it, you played it. It’s about creating a world.”

“I’ll say it’s not a difficult system to work on,” Smith says. “We’re coming from Sony platforms during the last gen! For us to focus on Xbox One has been great, because the guys can really dig into the hardware, and working with our partners [we’ll] continue to optimise so we can get more onscreen.”



GUN RUNNER

Doug Sheahan is one of Insomniac's lead programmers who "does a lot of stuff with player interaction". In other words, he's become something of a central point for the studio's makeshift gun workshop since the days of *Resistance 2*.

"We've never made guns this powerful before," he says. "When you have lots of enemies, having one shot take out six dudes is awesome; you feel powerful, but you're only taking out like 15 per cent of the OD'd. It lets us have weapons that have wider and bigger effects, which look and feel really cool, but won't let players just stomp the entire game.

"We have 150 people that are all creative, and everybody has their great ideas for guns. I start by thinking, 'Hey, we need assault rifles, rocket launchers, grenade launchers, something you can fire and forget, what have you', and then the whole studio starts sending ideas. Ultimately, a player can feel the difference between a bunch of guns that are thematically different but play the same and a bunch of guns that play completely differently."

Christian calls them, and grinding escalating rails to the tower's top, you'll want to have accumulated as much style as possible to have every Amp active for the area's boss.

"Sure, I can pick up the controller and do something awesome without being any good," Smith says. "That's something *Tony Hawk's* [games have] in spades and that's really what we wanted to do, but there's a level of mastery that you need to build up in *Tony Hawk* to get good at it, too. [In *Sunset Overdrive*], you have to build momentum. You get extra powers and do more damage, and some of the enemies won't even notice you're shooting at them when you're at style level one or two."

"We're overt about rewarding you for playing fast and hard and not stopping," Murray says. "You *can* stop, but the whole thing is that we're rewarding you for putting your neck out there and not letting up. A kill is worth more if you're grinding, and if you're not doing stuff, your Style Meter is going down, so getting in there, mixing it up and maintaining that velocity is your aim."

The island's boss is a colossal Fizzco balloon mascot named Fizzie, militarised and armed to the teeth to prevent incursions into Fizzco property. It's a boss fight on rails that reclaims the notion of 'on rails' from a thousand guided shooters. Here, the rails are literal coils wrapped around the tower and Fizzie's glowing weak spots are spring-loaded drums suspended high above the city's rooftops – inexplicable, yes, but don't dwell on it – that you'll have to leap on while evading incoming fire by switching between rails and never, ever stopping. "I think, during the last generation, we've all been trained to hunker down behind barriers and wait out combat," Price says. "Now we're asking players to think differently, use a different toolset [and] push forward."

"We wanted to take the shooter genre away from cowering behind cover," Murray says. "You'll be rewarded for jumping over that cover and taking the fight to the enemy." And it's this that makes *Sunset Overdrive* feel new. If a trend is emerging at all from the new console generation, it's that wall running is the new cover, and attack is the new defence. We've spent the best part of a decade lurking in the shade of bullet-chipped masonry. For Insomniac, it's time to come out into the sun.

"I think there's a certain level of fatigue among players right now," Murray says. "If you look at Metacritic, there's this downward trend of scores, and I don't think it's just that all of a sudden game critics want to be extra harsh. What I'm looking for is just different experiences. I like shooters, but I want something different. I don't want every game I play to be another game like *Call Of Duty*; I want things to feel different and to have different experiences."

"You can stop, but the whole thing is that we're rewarding you for putting your neck out there and not letting up"

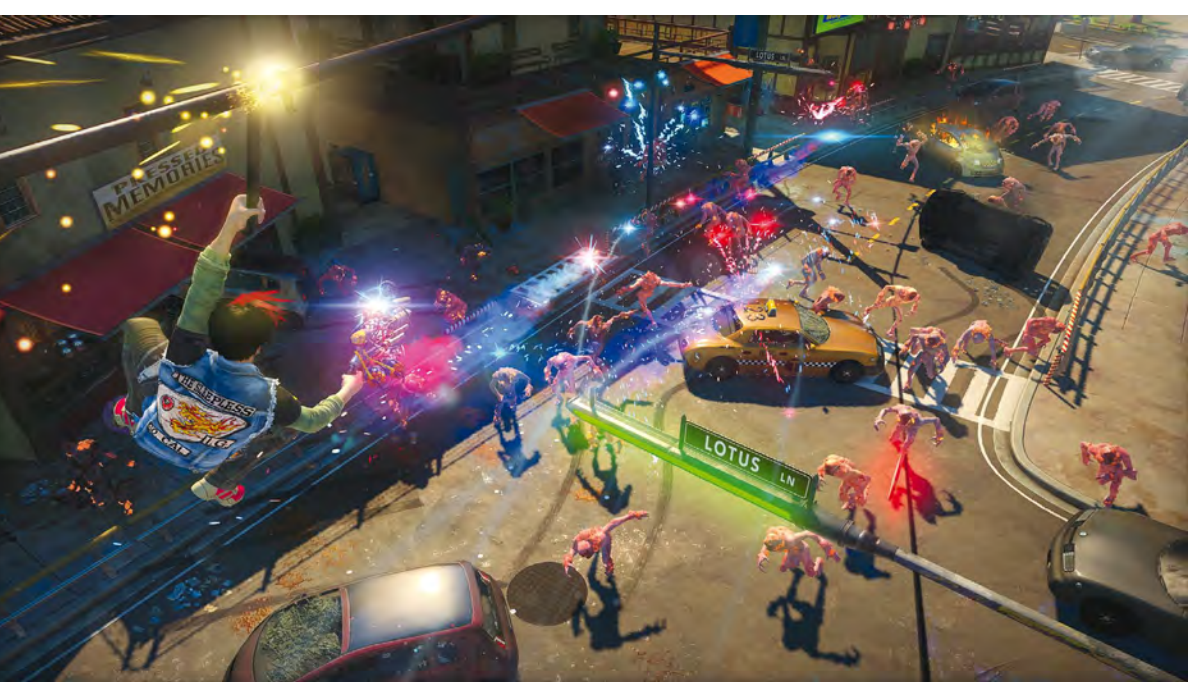
But the last time that Insomniac pitched a game so colourful and so different to a publisher and to the world, it shipped in a far greyer state than its early reveals. *Fuse* was the first major Insomniac game to stray away from Sony's platforms and the game the studio shipped looked nothing like the game its fans were promised by its technicolour pitch at E3 2011.

"I can assure you that it's not going to happen with *Sunset Overdrive*," Price says. "That's why we're showing you the game; that's why you're playing it. *Fuse*... We changed *Fuse*, and I think we heard loud and clear the reaction from players. We learned quite a bit about maintaining a consistent vision and growing it in a way that feels very authentic to Insomniac. So what I'm saying to you is that this is the game we're making. We're not changing it."

Thanks for that goes to Microsoft's squares. "The reason this game won't change is because from the very beginning Microsoft has said, 'We want Insomniac to be ▶



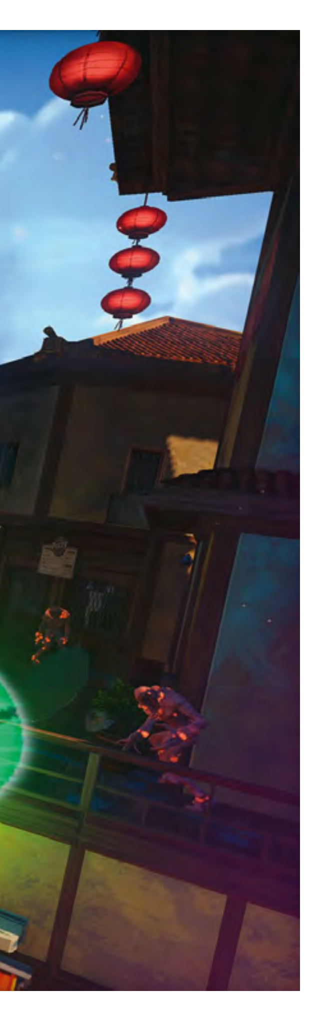
The Roman candle takes a shotgun-like role, best when it's indiscriminately fired into crowds



ABOVE **Before Fizzie's weak spots are revealed, players will have to hit three explosive platforms. *Sunset Overdrive* mixes platforming and shooting throughout, and places equal weight on both skills.**
LEFT ***Sunset Overdrive's* hero can ride the city's spiderweb of telephone cables from above or below, a quick tap of X dropping you beneath the cable to avoid low bridges or incoming enemy fire**



ABOVE **Little Tokyo's Japanese-inspired architecture means lots of short wall runs and oddly angled buildings, even at ground level.** RIGHT **The world transforms at night, along with the way the game plays. The 'zombies are more dangerous in the dark' gimmick is an old one, but *Sunset Overdrive* promises to offer new ways to deal with the after-hours onslaught, whether alone or playing with friends**



Insomniac," he says. "[With Microsoft], we had the opportunity to own our intellectual property, which we do with *Fuse* and we do with *Sunset Overdrive*. For us, as an independent developer, that's important. We've been creating IP for many years and so being in control of how those IP evolve and where they go in the future is important to us. I think Microsoft trust us with that stewardship, and that comes through in all the conversations that we've had."



Today, *Sunset Overdrive* feels like a Dreamcast game dragged 14 years into the future. It's a game about blue skies, bold colours and no logic save for videogame logic. It's a game built from recycled parts – the rails, the wall running, the colours, the 'bouncies', the guns – all scraps from games that died before they had a chance to really explore their ideas, or devices once so overused that players grew exhausted by them. Years later, they suddenly feel fresh again. *Sunset Overdrive* feels like something aggressively new, a gauntlet thrown down before the industry, and a manifesto for what comes next with a new generation.

"This is definitely what we want to see out of games," Smith says. "Games like *Jet Set Radio*, *Tony Hawk*... We want to bring those elements to a more modern experience, with some depth, story and a campaign that has a lot of unique ideas, melding them into something good. I think at its core, we're trying to make a really great arcade game that's fun to play for 30 seconds, or a minute, or five minutes, or whatever."

"The obvious thing players demand [of the new generation] is, 'I want to see something visually different,'" Price says. "Whether it's more on the screen, more realism, or more whatever. For us, it's about 'pop'. When I look at next-gen games, I want to see more popping off the screen somehow: more colours, more effects, more [things to see in] this city we're building. To me, *Sunset Overdrive* feels much like my vision of what a next-generation game could be. It hits you."

For Price, this nascent generation is also about a closer relationship with players, and Xbox One owners will be involved in the decisions that will shape *Sunset Overdrive* following its release. As you grind through the city, you'll see big screens running Sunset TV – Insomniac's own in-game TV channel – discussing the current and future state of the game and offering players a way ("better than just posting on a forum", it says) to vote on how the game will change and evolve. Specific details will be revealed another day, together with solid facts about the multiplayer mode, the crafting systems, and exactly what happens after nightfall. For the latter, all Murray will do is tease. "In the early days, we were actually talking about the book version of I Am Legend," he says. "He [protagonist Robert Neville] has free [rein] of the city, but then at night he has to hunker down and defend."

"I don't want every game I play to be another Call Of Duty; I want things to feel different and have different experiences"

"I think during the first year or two of a new generation are when the most risks are taken," Smith says. "I think establishing a new idea is a natural tradition, and we're looking at *Sunset Overdrive* as the first in a series. We want to build this into something bigger. We want it to be a real franchise. I'm personally looking forward to us being able to do more and more as we go, to build on the ideas we have now, and flesh those ideas out as the generation gets older."

"And it all just came from a lunch conversation we were having a few years ago," Murray says. "It was never meant to be anything real. It was just, 'If you could make any game, what game would you want to make?' We made *Sunset Overdrive*." ■













Fashioned from power tools, a mudguard and a car battery, the Hi-Fi is the game's bouncing bullet, made for use in narrow spaces



This issue's exclusive cover illustration was created by Vasili Zorin



Explore the iPad edition of **Edge** for additional content



AN AUDIENCE WITH...

TETSUYA MIZUGUCHI

The creator of Rez and Lumines talks synaesthesia, indies, and the Like button

By Daniel Robson

Mere months after the release of the widely acclaimed *Lumines: Electronic Symphony* for Vita, Q Entertainment co-founder and ex-Sega creative **Tetsuya Mizuguchi** announced he was stepping down from game development, remaining as a mouthpiece for his studio, but also taking on a role as a lecturer at Tokyo's Keio University. Then, in 2013, he left Q behind entirely, but so discreetly that it took an anonymous tip in March this year for the move to become public knowledge. Mizuguchi isn't giving up on games, though. He delivered the keynote at BitSummit 2014, Japan's annual indie gaming conference, and here reveals that he's looking forward to the future and his return to development.

During your BitSummit keynote, you spoke about independent DNA. Most of your games have been released by major publishers, but do you feel they nonetheless had a spirit of independence?

Even when I was at Sega, I had a kind of independent spirit. I was in Sega – a big company, yes – but at the time there were almost no indie games and no indie studio environment. Not like now. It was not easy. There was no Unity, no Kickstarter. I produced *Sega Rally* for Sega at first – a racing game, which is a major genre, sure. But after a few racing games, like *Touring Car Championship*, *Manx TT Superbike* and *Sega Rally 2*, I began looking for the next step, [asking], 'What is innovation in games?' That was just the beginning. We had Saturn, PlayStation. 3D technology came along and new sound technology came about, so I started preparing for the next stage. I loved music, and I loved musical and visual expression, but it was impossible at the time to create that kind of thing, and only later were we able to make *Rez*. I've been independent all the time, I think.

Why did you decide to go into academia?

After *Child Of Eden*, I was trying to find the next phase, and I needed a change. I wanted to learn more; I needed new points of view. Now I have a class about transmedia, so I'm teaching, but the students are also teaching me. We give stimulation and inspiration to each other, the students and me. Transmedia is the future media environment. Everything's going into the cloud. Everything from music, visual entertainment, gaming and interactive services – every entertainment service is becoming seamless. You play a game on PS4, and then stop and play the same game on a tablet, so what kinds of creations can you make in that kind of transmedia environment? And that's not just games, that's product design, services and any entertainment, including music… Maybe you apply for tickets for a live show, but you couldn't get a ticket. Maybe instead you get to join the concert yourself? This is just the start of the concert, and you can enjoy it and get much more engagement with the artist and the music. Maybe you can join in with some creation? That's kind of a future concept, and we're always exchanging ideas and thinking about the future of music entertainment, game entertainment and movie entertainment. It's very exciting.

What sort of thing do your students teach you?

One of the most interesting aspects for me is that in my class of 35, 80 per cent are non-Japanese, and I teach the class in English. The students are from Keio in Japan, the Pratt Institute in New York and London's Royal College Of Art, and it's a master's course for graduates, where my course is just one element of their master's. They're people from all over the world, and they all have different interests and different ways of being creative. Regardless of what they want to create or what industry they want to go into, I ask them to think, 'What is creation? What is innovation?' And they all share these ideas. Thinking about what it is that human beings want to create can help bring out the best in those students. We do a lot of workshops. The students aren't confident in how to find the what – the thing they want to do – and I help them find it. When they find the what, we need to find the how, the creative method, and the why – why do people want it? There is always a reason, absolutely, for everything. If I move, I have a reason. So we have to think about that. So I'm not so much a teacher as a mentor. And through this process, I am learning too.

Is there a reason why you've chosen to share your knowledge in the classroom, rather than through products made by your studio?

I need both. I need to share my experiences and ideas with the younger generation. This is one mission. But I also need to keep creating. So I'm doing both now. I'm preparing my own creation.

Are you working on a game?

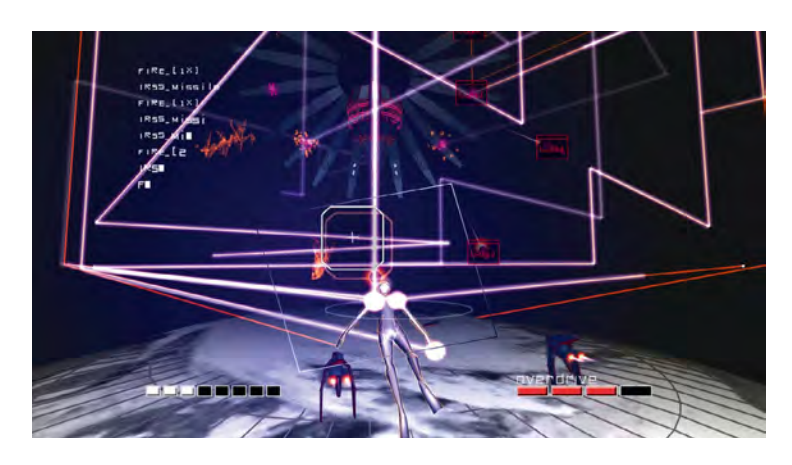
I'm helping with a few games, but these aren't like my past works. These are not like my created games. ▶



The Mizuguchi-driven *Sega Rally* was a big hit in the mid-'90s, but it's proved so durable that it's still a popular coin-op 20 years later



Child Of Eden was one of the few early Kinect games to validate the device's existence



Rez **is Mizuguchi's most iconic game, released in 2001 for Dreamcast and PS2, and given the HD treatment in 2008 for Xbox Live Arcade**

“AT Q, I HAD A LOT OF RESPONSIBILITY. I HAD 80 STAFF. AND NOW I'M ALONE, AND FINALLY I AM IN THE IDEAL SITUATION”

CV

Tetsuya Mizuguchi began working at Sega in 1990, where he helped build *Megalopolice: Tokyo City Battle* for Sega's AS-1 simulator. His experience working with 3D graphics prepared him to develop *Sega Rally Championship* for arcades in 1994. *Sega Rally 2* followed, before work began on various prototypes and eventually *Space Channel 5* for Dreamcast in 1999. He would go on to make *Rez* (2001) and a sequel to *Space Channel 5* before departing Sega to found Q Entertainment, where he would produce *Meteos*, *Every Extend Extra*, *N3: Ninety-Nine Nights*, *Child Of Eden* and puzzler *Lumines*. He departed the studio in 2013 and is now a media lecturer at Tokyo's Keio University and a free agent.

I'm helping with some social games in Japan; I can't say anything about it just yet. But I'm just helping. So I want to start a new project [of my own] maybe this year or next year.

And this would be a Mizuguchi game?

Mmm. I can't share details yet. At BitSummit, I shared my thoughts on synaesthesia, and this is a big thing for me. I started that kind of concept in games with *Rez*, and this is a long journey, across *Rez* and *Lumines* and *Child Of Eden*, and maybe *Space Channel 5* too. That part of my DNA will never die, so this is kind of a life's work for me. So I'm thinking about what is next, and what's the future experience.

Does that mean a return to Q Entertainment?

I left Q, and finally I found freedom, true independence. It was very healthy for me. From Sega, a huge company, to United Game Artists, which was owned 100 per cent by Sega, and then Q Entertainment, where we were co-founders and investors. I had a lot of responsibility. I had 80 staff. But all the time I needed to struggle with finances and management of people, and that was so tough. I couldn't concentrate. So then I decided to leave Q. And now I'm alone, and finally I am in the ideal situation. So maybe I'll start some project in the future [and] I will make a new kind of creative environment. I'm not that bothered about starting a new company. Instead, I'll connect with people and put together a group who are essential to the project, and then for the next project I'll start again. Everyone will be freelance. It will be similar to how you make a film or how you make music, with a group of independent people with specific knowhow working together. Nowadays, you can use time more efficiently thanks largely to the Internet, because we can talk on Skype, and we can send data and check it instantly. In that way, it feels like the future already. There's no need to go to a company at 10am every day.

Child Of Eden **was a Kinect launch-window title that sought to take advantage of then-new hardware. Have PS4, Xbox One and the potential of VR opened up spaces you're interested in exploring?**

New technology is always welcome, even if it's in the mobile environment. Many mobile games are not like console games, but that technology is very interesting. I want to think about the future from the point of view of what the future human wants. Now I'm researching human wants and instincts; in fact, I've spent two years researching wants and instincts through history. All games, all media and all services are a kind of mirror of human wants and instincts. We want to externalise our wants and instincts... Gaming is a unique medium and I've found a kind of formula in the process of making games. We design based on human wants and instincts all the time. I use the term 'wants and instincts' in a positive way, but they can often conflict. We want to be alone, but we want to be with somebody, that kind of thing. A fun game taps into that mix.

But does new technology impact on how you appeal to those ancient wants and instincts?

New technology and new products are being switched on all the time, but we have many desires and dreams and wants and instincts, and most of those are subconscious. Take the Like button, which is related to our need for esteem. If Facebook didn't have the Like button, it wouldn't be nearly as popular. Everybody wants to give esteem or to feel esteem. New ways to express that esteem are always being switched on. Our mission is to design like that. If people want to be happy or laugh or have fun with their family, please play *Space Channel 5*! Each game answers hidden human wants, and everybody wants to accomplish something. This is the structure, the invisible architecture. Games are all about invisible architecture all the time. It's very complex, but there is a formula and I want to find that formula so I can get better and better and better.

What inspires you outside of the classroom?

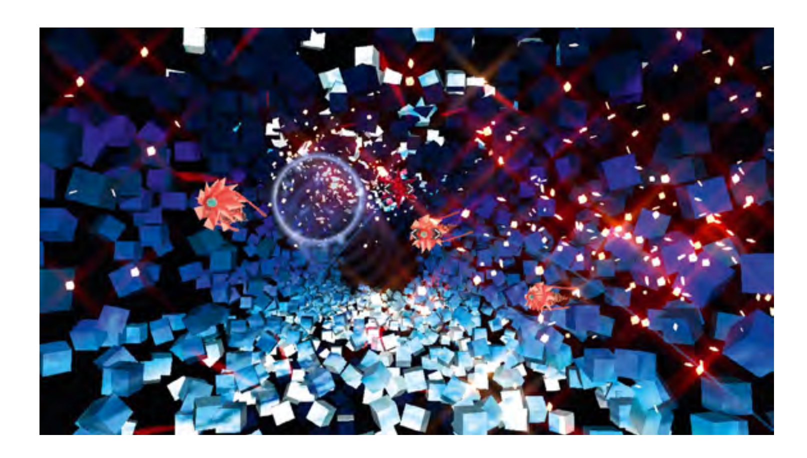
Many post-Internet services, such as Kickstarter. Kickstarter is a crowdfunding system, but it is really ▶





Mizuguchi has been taking a break from directing games, lecturing at Tokyo's prestigious Keio University. He has kept his hand in with work on some smartphone games, and tells us that he is planning a return to full game production soon

"WITH GAMES, IT'S NOT ENOUGH TO THINK ABOUT GENRES – YOU HAVE TO THINK ABOUT THE ESSENTIAL HUMAN ELEMENTS"



Synaesthesia, or union of the senses, is a concept that has inspired Mizuguchi's game design. In *Child Of Eden*, sound and visuals worked in tandem to produce a euphoric sensation

good design that caters to an obvious human want. 'I want help.' 'I want to help.' This kind of circulation is like a fun game. It's an invisible chemistry that makes you feel satisfied, and Kickstarter does that very well. Up until now, that kind of system existed between humans, but now those switches have been turned on by computers, by digital communications and games. That post-Internet world is the future. All those human wants and needs that have always existed can be fulfilled. With making games, it's not enough to think about genres – you have to think about the essential human elements or you cannot innovate. The IT world has found that a lot of new ideas are born by moving in that direction. Somewhere in there, I'm sure, is a hint to the future of game entertainment. *Minecraft* is all about getting involved and it hits another fundamental need: 'I want to create.' At the top of Maslow's hierarchy of needs is self-actualisation, and [*Minecraft* has] nailed that. In the past, you made a game for others to play, but now the player can participate too. That's the trend, so I'm interested in what systems we can implement next.

You've already worked in this space, haven't you? After *Child Of Eden*, you worked on the Vocaloid app, and that's something anyone can participate in to make and share music. The wildly popular Hatsune Miku Vocaloid music creator has similarities with your music project Genki Rockets, which blended together several voices.

In a way, Genki Rockets and Hatsune Miku are polar opposites. In Genki Rockets, I was involved in making the music itself, and that was a fun experience, but Hatsune Miku is about making your own music. It's fun to create music as an artist, but we need to think about how to motivate people and make them feel satisfied. I'm friends with people who make Hatsune Miku music and we discuss this a lot. I have a good connection with the Yamaha people and also the Hatsune Miku people. Both sides are important. The future holds multiple things, but you have to involve yourself. Everybody [in Japan] is watching Hatsune Miku, but she's kind of a metaphor. She is media itself. The core creators want to create music. 'I can create the lyrics, but I can't create the music itself. You can create music? OK, let's connect.' Only when people come together can she sing. Surrounding that core of creators are many fans who think, 'Hatsune Miku is cute; this music is really good.' And this is also part of the circulation. When the Yamaha people came to me and said, 'Vocaloid is very difficult to use and we want to expand the experience to casual, young people,' I could sympathise. I thought I could create a new UI and user experience that is easy and free-to-play and anybody can make music easily. And, yes, it's not as powerful as the full Vocaloid editor, but it's very fast. Trying things like this teaches you all sorts of lessons. A lot of game creators are hostile towards free-to-play models, but I'm not. I want to create to satisfy people's wants. Of course, I also want to be creative personally, so I want to match those things together and see what I can make. I want to undertake lots of different challenges.

Vocaloid is still very much a Japanese phenomenon, and many have criticised Japan's creative industries for an inward-facing approach. Among your Japanese students, do you see any who you think could take their home nation's style of creativity to the world?

Yes, a few. Not many. Not so much in games, but in creating new services. It's a media design class, after all. It used to feel like there were a lot of people working in games who had ideas that could change the world. But these days there are so many other services, like FourSquare or Spotify, and so there are fewer people who are dedicated to working only in games. From now on, I think creative people's skills will become more hybridised, and gamification is just beginning. Games will become as common as water and air in people's lives. When you think about it that way, games keep expanding. But even as they expand, I want there to be a core [of game development]. For all the talk about what will be the future of car technology or Big Data or the cloud, in terms of true creation as a designer, artist and creator, games are freedom. I don't think I'll ever forget that. ■



BO

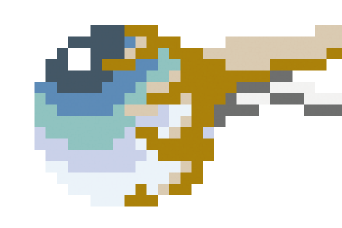
RUSH

End-of-level baddies, as we used to call them, have existed almost since the beginning. But why do they endure? What makes them appealing? And why do they so often go wrong?

By Joel Snape



Shadow Of The Colossus subverts the boss fight even as it elevates it: you hunt these beasts on your own terms ▶



The golden dragon is to blame. Prior to the creation of *Dnd*, coded in the mid-'70s for the University Of Illinois' pioneering PLATO (Programmed Logic for Automated Teaching Operations) system, it is generally agreed there was no such thing as the videogame boss. Developers certainly had little need for threshold guardians: games of the time were typically point-chasing affairs, shooting games, or recreations of sports such as table tennis and racing. Few were adventures and fewer still were designed to be conclusively overcome.

But Gary Whisenhunt and Ray Wood were making a complex-for-the-time RPG based on Dungeons & Dragons, and they decided there would have to be a way to finish their quest. The Orb was the solution: an ultimate treasure. After claiming it, players would retire to the Elysian Fields and even be enshrined on the title screen, at least in some versions. But to make this intangible bauble worthy of such esteem, and of the hard road before it, the Orb needed a suitable guardian – something impressive. Something to demonstrate your mastery over. And what better to guard a precious fantasy object than a dragon? The etymology of 'bosses' in games is more confusing – 1981's *Galaga* was among the first to use it – but that fearsome serpent embodied the concept.

In the decades since, the boss has become one of videogames' most enduring elements, performing many different roles. It is variously crucible, reward, teaching aid, story vehicle and final exam. Some common aspects of these encounters – the flashing weak points, the heavily telegraphed tells – have persisted right through gaming's adolescence, surviving from the 2D arcade shooter to find new homes in the 3D worlds of today. Bosses' ubiquity is puzzling, though, since as a whole they are notoriously uneven in quality. They can be the zenith of a game, or its nadir. So why, in this era of multimillion-dollar development and exhaustive playtesting, do so many still get them wrong? And how do you design a good boss fight?



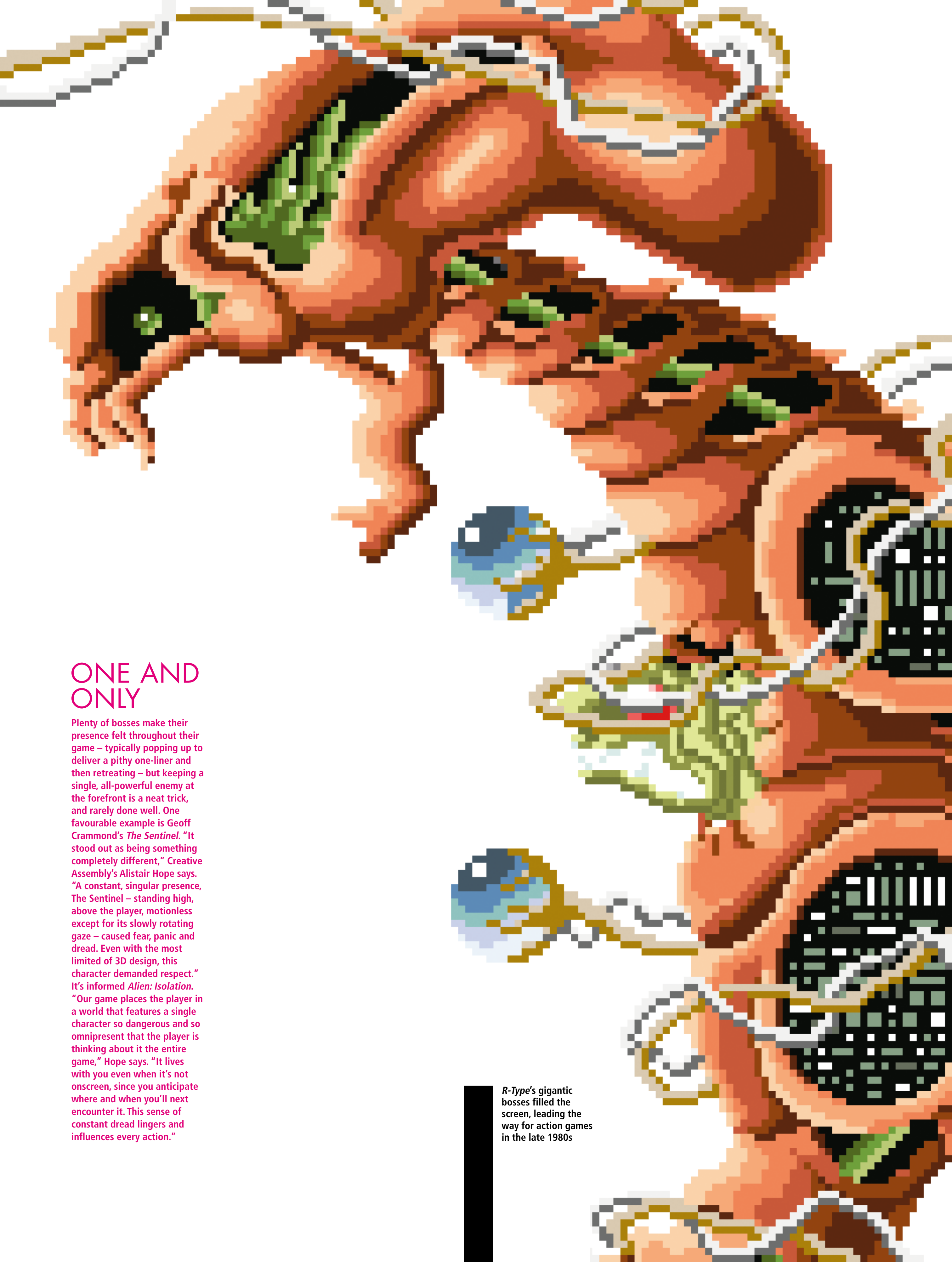
There is no easy answer. With innumerable different shades of boss, much depends on the design goals a fight is supposed to achieve, but even an encounter that meets its brief may not be considered a good one by a game's audience. There are, however, principles – guidelines that have emerged from decades of iteration and experimentation. And like so much else in gaming, the arcade would have a profound and lasting effect on the bosses of today.

These enemies were initially about spectacle, made to stick in the mind and bring in the coins. The almost-screen-width mothership of 1980's *Phoenix* – one of the earliest arcade boss fights on record – was barely more difficult than the levels themselves, but it offered a visual break from normal enemies. With limited system memory, this was the boss more as bonus than punishment, a chance for players to test their mettle against something more impressive than wave after wave of identical drones. *Phoenix* would also firmly establish the scale of a boss fight, with screen-filling enemies able to draw the eye across a packed arcade. But offering a Goliath to the player's David had fringe benefits: there's a psychological significance to being made to feel small and overcoming a larger enemy, although it is poorly understood to this day. Nonetheless, scrolling shooters would take this type of boss to ever-greater extremes.

An arms race began on the crowded arcade showfloor. Developers realised that bosses were a significant part of their games' appeal, so they made them more elaborate. This birthed bosses memorable not only for their looks, but also their challenge, including *R-Type*'s Bydos. And with the high score table to climb, beating a difficult boss could earn you serious bragging rights. Cynics might argue that greater challenge also helped keep playtimes short and pushed players to spend more on credits, but **Harry Kreuger**, lead coder on Housemarque's most recent love letter to the side-scrolling shooter, *Resogun*, refutes that.

"I don't agree with the notion that arcade bosses were ever designed only to take players' money," he says. "I believe that to be a massive disservice to the games of that era and the brilliant design choices many of them made. That being said, of course the designers needed to ensure that play sessions wouldn't last too long, but the experience crafted within those constraints still needed to be engaging, fun and rewarding, bosses included. So despite their coin-operated nature – or perhaps because of it – the good arcade games of that era ended up defining the dynamics of skill-based games to a huge extent. Those same design principles still apply universally to all skill-based games, regardless of whether they're coin-operated or not." ▶

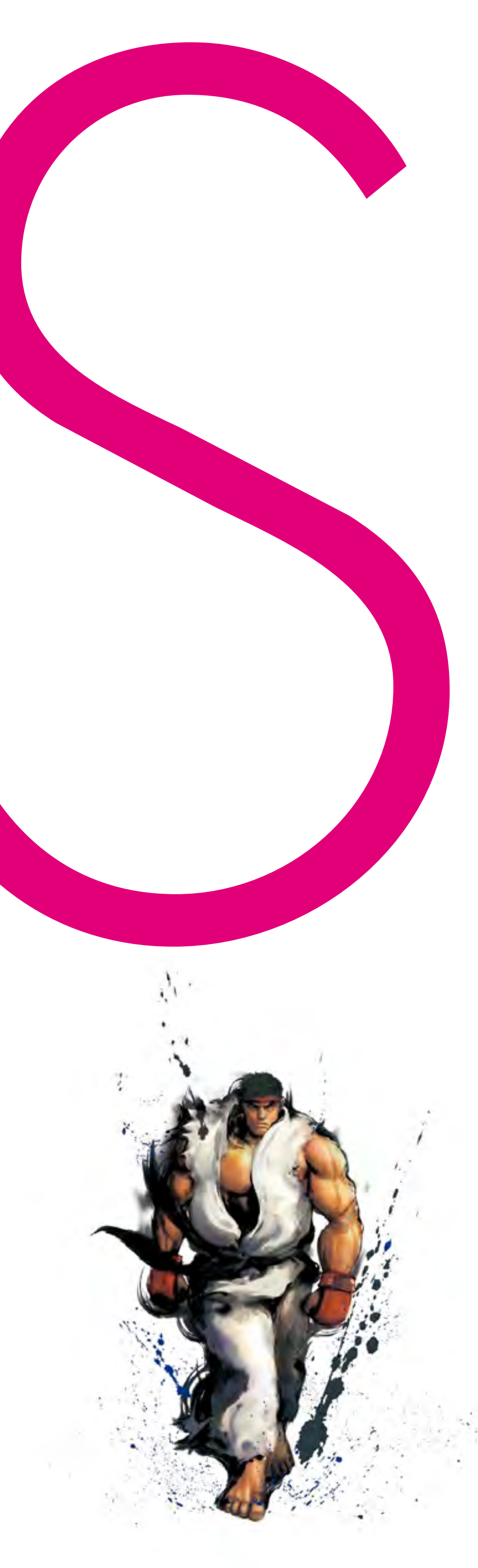
BOSSES' UBIQUITY IS PUZZLING, SINCE AS A WHOLE THEY ARE NOTORIOUSLY UNEVEN IN QUALITY. THEY CAN BE THE ZENITH OF A GAME, OR ITS NADIR



ONE AND ONLY

Plenty of bosses make their presence felt throughout their game – typically popping up to deliver a pithy one-liner and then retreating – but keeping a single, all-powerful enemy at the forefront is a neat trick, and rarely done well. One favourable example is Geoff Crammond's *The Sentinel*. "It stood out as being something completely different," Creative Assembly's Alistair Hope says. "A constant, singular presence, The Sentinel – standing high, above the player, motionless except for its slowly rotating gaze – caused fear, panic and dread. Even with the most limited of 3D design, this character demanded respect." It's informed *Alien: Isolation*. "Our game places the player in a world that features a single character so dangerous and so omnipresent that the player is thinking about it the entire game," Hope says. "It lives with you even when it's not onscreen, since you anticipate where and when you'll next encounter it. This sense of constant dread lingers and influences every action."

R-Type's gigantic bosses filled the screen, leading the way for action games in the late 1980s



Still, whether it was premeditated or not, the escalation continued. But not every game could rely on the screen-filling excess of scrolling shooters, and AI at the time wasn't advanced enough to challenge a skilled human player in a fair fight. As such, fighting games soon resorted to imbalance or even outright trickery to make up the shortfall. *Street Fighter II*'s M Bison was one such cheat, capable of chewing through credits as fast as any *Sinistar*. Bison's moveset was unlike any other in the roster, boasting more invincible frames, no-charge Psycho Crushers and Scissor Kicks, and massive damage output. In an era without YouTube, he was a fine way to dig coins from the pockets of gamers desperate to see, say, Dhalsim's ending. Were he and his spiritual successors unfair opponents? Certainly, but with good reason.

"Fighting games are magical, and there are few genres with more meaningful, nuanced player options," says **Seth Killian**, ex-lead designer at Sony Santa Monica and namesake of *Street Fighter IV*'s infuriating final adversary. "But fighting games are primarily built as a test of your decision-making and execution against another human. When you subtract the other human from that equation, they tend to fall apart. Building a genuinely challenging AI would be a major accomplishment in computer science, so instead designers usually just cheat. If you don't, you're signing up for a lot more work and the boss will probably still be too easy. So if you're a designer tasked with creating a final legendary opponent and your choices are between weird and easy or stupid-hard, it's easy to see why so many fighting games choose the dark side."

The King Of Fighters series took that to extremes, its bosses frequently equipped with no-recovery special moves, infinite super meters, and the ability to react to player inputs instantly, effectively making them mind readers. But this is far from an SNK-exclusive problem.

The alternative, for fighting games at least, is to return to bosses as rewards, offering an oversized monster that provides a break from the normal gameplay, and using attacks that aren't designed to be recycled in multiplayer matches. *Marvel Vs Capcom*'s bosses are an enduring example: Apocalypse, Abyss and Galactus all engulf the screen during different stages of the fight, offering attacks that can't be blocked or interrupted in the same way as any other character, but compensating with hitboxes to match their stature. Skilled players have responded with their own combo videos, pushing the boundaries into hundreds of hits.

Boss-as-refresher suits the arcade modes of fighting games, since the real longevity and tests of skill come from other humans. Radically changing pace with a boss fight can ruin other genres, however. *Deus Ex: Human Revolution* is a story-driven action-RPG that's built upon options. If you want it to be, it can become a nuanced stealth game with the option to do no harm (well, for most of its runtime). But that core game – before the *Director's Cut*, at least – was compromised by its arena fights against superpowered opponents, which feel horribly incongruous. At best they're out of character and at worst they throw up a blockade for otherwise-valid playstyles.

Uncharted 2 made almost the same mistake, with a final boss that feels at odds with the rest of the game. "The problem arises when you learn a set of good, interesting mechanics over the course of a game," Killian says. "Your skills improve as you play, and maybe you even master those mechanics. Then you get to the boss, the final challenge, and for the sake of being 'big,' the designers abandon all those mechanics they've spent hours teaching you, and instead ask you to play what's essentially some totally different kind of minigame. The boss may be huge, the music may be epic, but once you set aside the spectacle, the gameplay is often mini."

> "YOU GET TO THE BOSS AND FOR THE SAKE OF BEING 'BIG', THE DESIGNERS ABANDON ALL THOSE MECHANICS THEY'VE SPENT HOURS TEACHING YOU"

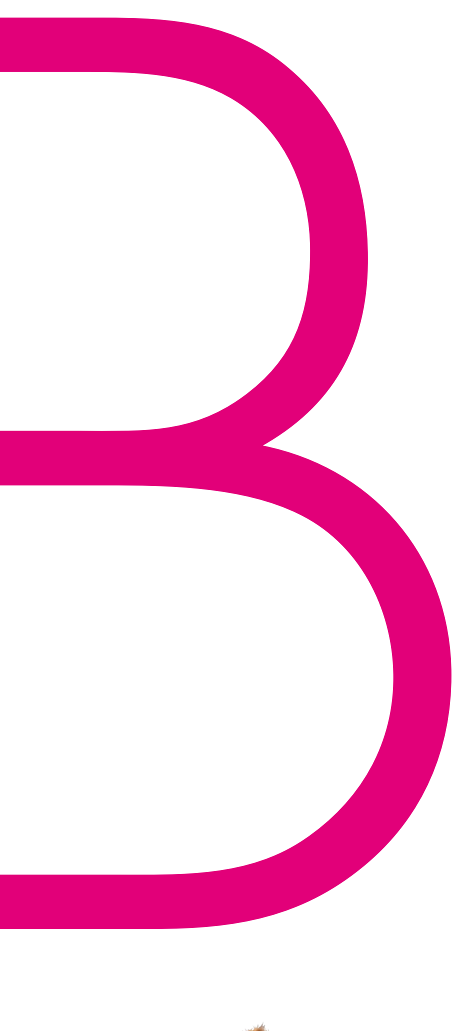
A boss shouldn't cheat the player by breaking established rules, in other words. That doesn't mean it can't add to what's come before, or subvert the norm, but it shouldn't ignore the fundamentals the designer has taught you up to the battle. "I really liked the way *Dishonored* handled its final encounter," says **Alistair Hope**, creative lead on *Alien: Isolation*. "It chose to maintain the primacy of player choice over everything else, right to the end. The player was left to deal with the obstacle with the tools at hand and the skills they'd learnt over the course of the game. It really reinforces the belief that the player's understanding of the world and choices of action mean something." *Dishonored*'s solution is an elegant one to a relatively new problem: the sheer amount of tools, tactics and options games now provide. ▶



WITH A WHIMPER

Sometimes it makes little conceptual sense for a boss to be hard: if the player's nemesis is simply an average man pulling strings, there's a certain satisfaction to finishing him with nothing more than a disdainful point-blank double-tap. Arguably the finest example in gaming is *Manhunt*'s 'Director', the Brian Cox-voiced character who runs convicted felon Cash through a gauntlet of snuff scenarios and dead family members while keeping his distance via headset and CCTV. When the tables are turned and his last line of defence – chainsaw-wielding lunatic Piggsy – is defeated, the Director has nothing but a pistol left. It's just six shakily aimed shots before he's utterly defenceless. Grim satisfaction indeed.

M Bison offers a much fairer fight in the *Street Fighter IV* games, with new final boss Seth the focus of players' ire



osses can, in fact, be a powerful way to teach game mechanics. *Dark Souls*' first boss battle is renowned for its difficultly, falling so early in the game that you are thoroughly under-equipped to beat him. For all but the most skilled, the only viable option is to escape. The lesson is clear enough: FromSoftware is not afraid to pitch you foes above your ability, and running away is perfectly reasonable when it does. Your rematch with the Asylum Demon, however, comes just 15 minutes later, and puts players in the ideal position for a falling strike, hugely reducing the monster's health with a technique that can be used from any elevated position in the game. The rest of the fight against this mace-wielding titan teaches the primacy of evasion and blocking, of learning attack patterns and looking for openings – a valuable primer for the 40-plus hours to come.

Saurian Dash, author of Bayonetta: The Official Guide, agrees a tough-but-fair boss is an ideal way to grow your abilities. "I feel boss battles are like lessons, like obstacle courses," he says. "When you master different aspects of the system, you improve at them and play the rest of the game better. If the system is deep enough, there shouldn't really be an upper limit to what you can do; that's what makes games like *Devil May Cry 3* and *Bayonetta* so amazing. I can spend a week on one boss battle."

But these bosses only work when a game has systems to teach. *God Of War*'s bosses are renowned for their titanic size and spectacle, but Dash finds them hollow. "There are so many games that are sort of like an interactive movie. Other games you need to really dig deep to find these little treasures in the system. You find a new trick in the system, and then you realise that you can do something else, and it goes on and on and on. [With *God Of War*], it's horrible to say, it doesn't sound nice, but I don't get those breadcrumbs, and I don't find those interesting things down the line. It's like, 'What you see here, this is the game, and there's nothing beyond this'. That's no problem, but I can't make the system my own. I can't push against the boundaries. It's like the bar of expectation is lower. The best games, for me, are the ones where the bar is set extremely high and I'm like, 'Why didn't I see this before?'"

This, of course, can be a distinction lost on players unwilling to invest the time needed to appreciate a game's intricacies and master its systems. "In *Bayonetta*, the transition from Very Hard difficulty to Non-Stop Climax is that you really have to crowd control," Dash explains. "You really have to know the enemy attack signposts, know when to parry... People complain that you fight Jeanne three times, but each time she has a different move set, so you're fighting three different bosses. It's the same in *Devil May Cry*: the Cerberus fight actually works better in Dante Must Die mode, because the faster timing is more natural. In *Metal Gear Rising*, once you realise how the Blade Mode cancel works, it changes the game."

Dash's YouTube playthroughs are dazzling displays of this skill, but so far beyond the reach of most players as to be almost superhuman. Building for masters will inspire a level of devotion in a subset of the market, but can vastly reduce your accessibility. *Batman: Arkham Origins*' Deathstroke fight is a case in point. It's a battle of counters based on responding to aggressive volleys of attacks and then hitting back. Once you've got the hang of the mechanics, it's beautifully designed – every attack illustrates Deathstroke's character, and every single one can be countered. Until then, it feels frustrating and arbitrary. It comes early in the game and assumes a degree of understanding of Batman's combo and counter systems. Gauged by the Twitter and forum backlash, that meant it was too much of a stretch for the audience.

"IDEALLY, YOU WANT TO DANCE ON A THIN LINE WHERE THE PLAYER FEELS SERIOUSLY OUTCLASSED, BUT THEY DON'T FEEL HOPELESS OR REALLY ANGRY"

"I'm very proud of the Deathstroke boss fight," says **Michael McIntyre**, games director at WB Games Montreal. "I know that the reaction has been polarised on this particular fight and I think that's fair. In hindsight, I think there are some things we could have done to help players prepare for it, but I wouldn't change the heart of it. It was important to us that Deathstroke should feel like a complex and dangerous opponent. Our goal was to make Deathstroke look cool and test the player in a way that made them a little better at countering in combat, which is one of the core skills in the game. I think the first sign we achieved what we wanted was when we saw players lamenting that they only get to fight him once."

The fight wasn't so much the issue as the timing, and challenge and pacing are tough balances to achieve in the modern landscape. Unlike their '80s counterparts, the budgets involved in triple-A development mean that few developers have the luxury of simply telling the player to toughen up.



Games often have to sell millions of units to break even, so they have to appeal and not frustrate. One way or another, everyone expects to see the final cutscene. And yet making things too easy robs a boss fight of real achievement. That's not to say every game has to mollycoddle players, though.

"Ideally, you want to dance on a thin line where the player feels seriously outclassed, but they don't feel hopeless or really angry because of deaths they can't understand or avoid," Killian says. "There are some great examples in *Dark Souls*. [FromSoftware] use a lot of standard boss tropes like 'brutal attack followed by briefly vulnerable period', but the variety of attacks, ranges, their special effects, and the way the bosses move really help to set them apart. When you add that to the player's own rich movement and defence options, you usually have the feeling like, 'I could have pulled that one out! If only I had rolled!' If the designer can keep the player feeling like there's something clever they could have done to win, even if the odds are stacked against them, that's the best-case scenario."

The modern boss has to be many things to many players: challenging for experts, achievable for newcomers, a lesson, a reward and a way to define the game itself, especially when the game is built around its bosses, as in *Shadow Of The Colossus*. *The Wonderful 101* highlights the problem with hidden depths perfectly. "What I found with *Wonderful 101* is that it's absolutely packed with stuff, but it tells you none of it," Dash says. "There's a visual language to the game, and once you get that – once your mind is open to the possibilities in the game – you see opportunities everywhere. What you have to do as a game designer is ask yourself, 'Is my target audience going to persevere and have the mindset to look for these things?' Because people will come across a problem with the game and stop there and go, 'This feels broken'. I think a lot more needs to be done to open these things up for people."

What developers often forget is that the ramp up for a major boss battle starts long before the player enters the arena. Time invested in building their skill in the early stages of a game will allow for better and more elaborate bosses in the later sections, where interest might otherwise wane. Pitch it right and the boss becomes both a means and an end: a way to teach and to reward.

"Bosses are intended to challenge the player," says Kreuger. "The thing is that it's not really possible to maintain the intimidation factor and impact of a boss encounter if it's a total pushover, so making them too easy robs them of their purpose. There's a great emphasis on 'rewarding' the player for their efforts, but I think the primary source of reward should be defeating the boss itself." ■

ULTIMATE FORM?

Who is the greatest boss ever created? There are a hundred contenders, but few hit every criteria for success like The End, *MGS3*'s wheelchair-bound sniper. If tackled directly, the sniper-duel against him is an hour-long test of nerve and aim, spanning three 'zones' of the game and offering ample opportunities to change tactics – are you, for instance, the sort of soldier who'll shoot a parrot? And, crucially, if persistence isn't the player's strong suit, there's always the option to wait the old man out, or dial the console's internal clock a week forward, so that he passes away in his sleep.



Human Revolution*'s Fedorova was combat heavy, but sneaky players can gas her in the *Director's Cut



LOLA 8A
CIRCA 1985–?



VIRTUAL BOY
1995–1996



LASERACTIVE
1993–1994

LIFE AFTER DEATH

PIPPIN
1995–1997



SATURN
1994–2000

How the guardians of gaming's past are working to ensure that yesterday's systems – no matter how obscure – will never be forgotten

By Richard Moss



JAGUAR
1993–1996



NUON
2000–2002



PECOM 64
CIRCA 1985–?

F or **James 'Shamus' Hammons**, *Doom* and a limbless, white-gloved cartoon mascot were all it took to ignite a longstanding obsession with Atari's Jaguar. Back in the early '90s, he felt he couldn't abandon his Atari ST for IBM PC-style computing simply to play id Software's genre-defining FPS, but then the news came that *Doom* would hit his favourite company's new 64bit console. The real clincher came later, however. "I saw a preview of *Rayman*," he recalls, "which at the time was going to be a Jaguar exclusive, and it looked amazing."

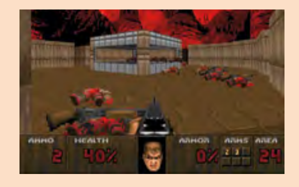
Today, Hammons – the lead developer of the Virtual Jaguar emulator – is just one of a growing scene of enthusiasts dedicated to sustaining consoles the world would sooner forget, earning them some respect for the niche they tried and failed to carve out. These emulator developers, amateur historians and digital archaeologists want you to remember Jaguar's brief run at Nintendo and Sega's dominance, and Virtual Boy's daring attempt at 3D gaming almost 20 years too soon. And they're desperate to preserve something of ambitious systems such as Nuon and Pioneer's LaserActive, which were never widely known in the first place.

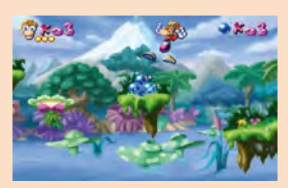


Virtual Jaguar developer James Hammons is an IT freelancer by day

THEY'RE DESPERATE TO PRESERVE SOMETHING OF AMBITIOUS SYSTEMS SUCH AS NUON AND LASERACTIVE

Hammons' early enthusiasm for Atari's Jaguar hardly matched the gaming world at large. Released in North America on November 15, 1993, and in Japan and Europe the following year, it represented Atari's final stab at relevancy in a market rejuvenated and then snatched away from it in the latter half of the '80s by Nintendo and Sega.

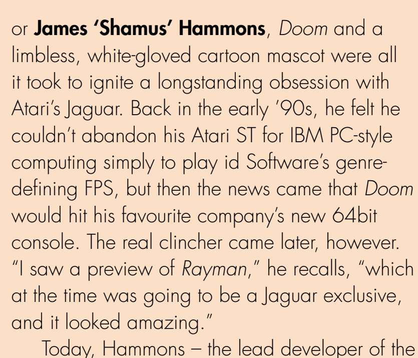




From top: *Doom* brought the FPS to consoles long before *GoldenEye*; *Rayman* was once destined to be a Jaguar exclusive

But Atari's 64bit console was notoriously difficult to develop for, and neither *Doom* nor *Rayman* nor Jaguar-exclusive *Tempest 2000* could prevent it failing spectacularly at retail against the older SNES. Humiliated, Atari pulled out of the videogame hardware market in 1996.

Hammons let go of his Jaguar, too, but the memories never faded and several years later he went searching for an emulator that could play the Jaguar version of *Rayman*. None could, although David Raingeard's Potato Emulator was apparently making rapid progress. "And it seemed that he was doing his best to make it run most games," Hammons says.



Atari's Jaguar fell over in a few areas, not least with its poorly designed joypad

Raingeard abruptly stopped working on the emulator without explanation in mid-2003. He released it under a general public licence, though, whereupon a programming group called SDLEmu used it as the basis for its open source Virtual Jaguar project.

"*Rayman* still didn't work properly," Hammons says, "so I decided to take a look at the source code and see if I could somehow fix the problems with it."

The code was a mess. "It relied on a non-portable, closed-source 68000 core written in x86 assembly language," Hammons explains. It was also littered with game-specific hacks that made it good for only a handful of titles. Little wonder Raingeard abandoned the project: he had coded himself into a corner. Adding support for *Rayman* would be no easy feat, and it proved just the tip of the iceberg.

"I can't remember what I tackled first," Hammons continues, "but I was determined to get the codebase into a more sane and portable state." He presented his changes to Niels ▶

SAVING FACE

In September 2012, Planet Virtual Boy forum member Bigmak spent a five-figure sum to acquire an 80-per-cent-complete prototype of the unreleased *NicoChan Battle*, or *Faceball*, as it's known in the west. He dumped it into ROM form and put it online for free download, while fellow enthusiast Thunderstruck hacked it to completion. The 'remastered' version was released in April 2013, followed several months later by version 1.0 of a modding tool called FacEdit, which enables easy design of custom levels as well as gameplay tweaks.



Wagenaar of SDLEmu, and within a few years he became the primary, and then sole, developer on the Virtual Jaguar project. He and a handful of contributors continue plugging away at the emulator to this day, making progress mostly by writing test programs or finding software that doesn't work and painstakingly analysing how it exposes weaknesses in the emulation. Hammons wrote a pipelined version of the emulator's digital signal processing, for instance, because he discovered that *Wolfenstein 3D* needed that feature for its audio.

Every performance or compatibility gain is embraced by a small group of Jaguar fans on the AtariAge forums. Hammons says the Jaguar scene has undergone a mini-revival in recent years, spurred in part by his emulator, but also by new game development. *Downfall*, a simple game in which your goal is to stay within the bounds of the screen while falling, was released in 2011 by leading Jaguar developer Reboot, a six-strong team of coders. *Downfall* now comes bundled with Virtual Jaguar. Éric Chahi's *Another World* was also ported to the console last year, courtesy of Sébastien Briais from programming group The Removers, who got the idea and Chahi's approval after seeing a Linux port of the game's engine in 2007.

Hammons isn't alone in his quest to keep the outcasts of videogame history alive. Some lead the battle for their system almost solo, trailing a handful of enthusiasts and homebrew coders in their wake. Others find strength in numbers.

Christian Radke founded Planet Virtual Boy in 1999 with the intent to preserve, document and develop new games for Nintendo's unwanted red-screened stepchild. A surprisingly robust community soon formed around the site, where members share their discoveries and work together to learn more about the system.

Intended as a pioneer for virtual reality gaming, the distinctive tabletop console's red-on-black stereoscopic 3D visuals won it few fans upon its release in Japan and the US in mid-1995, leading to its discontinuation only months later. Nintendo probably would rather you forgot it ever existed; tellingly enough, even when the notoriously secretive company decided to provide sales figures to NeoGAF user Aquamarine for consoles stretching back as far as SNES, Virtual Boy was omitted from its figures.

But Radke, a professional web developer, is determined to prove the device's worth and to record its high and low points for all the world to see. He first got wind of Virtual Boy in a one-page article in Germany's official Nintendo magazine at the impressionable age of 13, although it wasn't until 1999 that he got his hands on one. His fascination has since morphed from giddy anticipation to studied curiosity.

"One thing I enjoy almost as much as a good game or building websites is researching and documenting niche videogame systems and their history," he says. "Searching through old magazines and websites, talking to former developers, looking at game binaries for cut content, unearthing previously unknown details, finding images of unreleased games – it's like digital archaeology."

Radke and his Planet VB cohorts have developed entire Virtual Boy games from scratch. Radke is personally responsible for a *Sokoban* clone called *Blox*, along with a sequel, *Blox 2*, while others have released rhythm games, platformers, an unfinished and wholly unofficial *Mario Kart* sequel and more. They've tracked down marketing materials, including game screenshots and videos, along with official documentation, and dumped and distributed



Accurate sales figures for Virtual Boy are hard to come by, but the console lasted less than a year before being discontinued

copies of unreleased games – namely *Bound High* and *Faceball* – on cartridge as well as in ROM form. The Planet VB community builds its own development tools to simplify the process of developing homebrew games and apps, and the site holds homebrew coding competitions roughly every two years, the most recent of which yielded a Game Boy emulator running on Virtual Boy.

There are few limits to these enthusiasts' dedication beyond the time they have spare to commit. For example, one member, Guy Perfect, spent weeks putting together a painstakingly detailed tech scroll that breaks down the inner workings of the system, simply to fill out the smaller details that had been overlooked in other documentation, both official and unofficial.

It's this obsession with preserving Nintendo's console in its totality that unites the community, and Radke points out a quirk in the system's appeal: "Compared to most other consoles, there's a manageable amount of Virtual Boy-related things. Getting it all together is very possible, be it in the form of a complete collection of games [22 were released], hardware and merchandise, or complete informational coverage, like on Planet VB."

This puts the system in stark contrast against the swell of thousands of titles that exist on more popular systems such as Sony's PlayStation or Nintendo's NES. Obscurity is both a blessing and a curse when it comes to preservation.

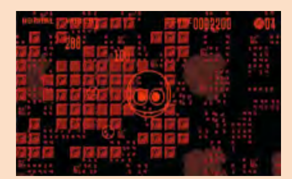
"The winners always write the history," game development student and Pioneer LaserActive historian **Max Krieger** says, "but that creates a clouded picture. And I think people, and game developers in particular, deserve to know about the failures." Krieger speaks with a wisdom beyond his years. A student enrolled in DePaul University's games programme in Chicago, he discovered the LaserActive console while browsing around Wikipedia a few years ago.

Pioneer's LaserActive is a strange footnote in videogame history, released in North America and Japan towards the end of 1993 with a price as monstrous as its crate-like shell. Intrepid buyers faced an outlay of $970 for the base unit, which was a bare-bones LaserDisc player, plus around $600 each for the two modules that played









From top: Planet Virtual Boy founder Christian Radke; Radke's *Blox*, one of dozens of homebrew VB titles that now exist; a never-completed fan-produced *Mario Kart* game; *Bound High*, a canned title that was saved from the scrapheap by the fan community

A world of red and black awaited behind these plastic lenses, but Virtual Boy's failings were too intrinsic for it to catch fire



Sega Genesis/CD and TurboGrafx (PC Engine) games as well as LaserActive-specific LaserDisc games such as the Taito-developed *Hyperion*. There were two other modules, too, for computer connection and karaoke, in addition to special 3D goggles you needed for rail shooter *Vajra 2* and a few non-game multimedia titles.

Krieger has dedicated much of his free time over the past two-and-a-half years to unearthing everything he can find about the rare console.

"I think the LaserActive caught my eye because it was so outlandish," he says. "It was this massive machine that took like an entire entertainment centre to fit. It made a lot of noise [and] it cost a lot of money, so I was like, 'How did this thing even get released?'"

"LASERACTIVE CAUGHT MY EYE BECAUSE IT WAS SO OUTLANDISH. IT WAS THIS MASSIVE MACHINE"

What made it even more intriguing for him was that Pioneer's LaserActive had no emulator. Popular consoles from the same era had functional and fast emulators before the turn of the millennium, and these days even the LaserActive contemporaries that failed have some level of emulation – Philips' CD-i has CD-i Emulator, Atari's Jaguar has Virtual Jaguar, and 3DO has FreeDO and 4DO, while Fujitsu's FM Towns Marty has UNZ and Xe. Yet Pioneer's machine didn't even have a work-in-progress project. There was scant information about it or its games on the Internet, so Krieger started digging, and he hasn't stopped since, creating the LaserActive Preservation Society along the way to record and share his findings. ▶

Krieger spent $450 to buy and repair his second-hand LaserActive with five games and a Sega module, and he uses this setup to record footage that he posts to YouTube so that at least something of the console has been documented for the generations to come. The LaserActive Preservation Project's channel has 19 unabridged gameplay videos at the time of writing, with more promised to come soon.

There's now a hope for a more tangible kind of preservation, too, because a few clever souls at the SpritesMind Genesis homebrew development forums have figured out a way to dump the data contents of the LaserDiscs via a Sega-controller-to-USB adapter cord. This could pave the way for emulation through retooled Sega CD and TurboGrafx emulators, although that won't happen right away.

"The next part that's a real challenge is that LaserDisc video is not digital, it's analogue," Krieger explains. "It's a lot like a vinyl record; it just reads the data as it finds it. It's all analogue encoded, and that's why you can't really just put it 1:1 in a digital format. You [still] have to choose a format to store it in and, no matter what, you're going to lose a little bit in the transmission."

In the meantime, the LaserActive Preservation Society's focus is on getting video footage of games as well as photos of documentation, packaging and marketing materials, and whatever else Krieger and a collector named Tom (whose surname we're asked to keep private) can string together. Information comes in part through donations and inside leads, but primarily, Krieger says, "it's just Internet detective work," by which he means rifling through Google Books, eBay Japan and archived press releases, plus tracking down former LaserActive developers.





LaserActive Preservation Project founder and game development student Max Krieger (top), and Miodrag 'Micko' Milanovic, who coordinates the MESS project

> **WITHOUT STUDYING AND LEARNING FROM FAILURES LIKE PIONEER'S, HE ARGUES, WE MIGHT REPEAT THEM**

He considers this work crucial to developing a complete picture of videogame history. Without studying and learning from failures like Pioneer's, he argues, we might repeat them. "I think it's really important to remember why it didn't take off," Krieger says.

He also thinks it's vital that students of game design consider what obscure games did right that more famous titles did not – his contemporaries might have a background in classic games, but few know about the really obscure stuff. "So they're all working on the same page," Krieger says, "but I just think that if they knew about some of this stuff it would totally change their perspective."



LaserActive looks like an oversized DVD player, and its add-on modules are equally monstrous

Nuon, Jaguar and Vectrex mega-fan **Kevin Manne** can vouch for the redeeming qualities of failed consoles. "Getting a Jaguar is like finding the good in what everybody else thinks is terrible," he says. "There's always something fun and worth playing on any of these systems."

You just have to find it. Which shouldn't be hard at all when it comes to Nuon games, given that only eight were officially released (and over a dozen more were cancelled). The Nuon technology amounted to a graphics chip that added videogame and enhanced multimedia support to DVD players. It was included in a handful of machines from a variety of manufacturers between November 2000 and July 2002, following several years of research and development by much of the former Atari Jaguar hardware team.

"It really was the PlayStation 2 idea before PlayStation 2 came around," Manne says. "It was a DVD player and videogame console all in one – they were just doing it the other way around. They wanted to have the Trojan Horse effect and get this videogame processor into existing DVD players to replace the DVD encoding chip in there for a minimal upgrade cost to the manufacturers."

It was a dismal failure. Manufacturers held back for more games while developers waited for a larger installed base. And not even Jeff

THE MYST OF TIME

"The holy grail of the LaserActive is the *Myst* prototype," says Max Krieger of the LaserActive Preservation Society. Cyan's famed point-and-click adventure was meant to be ported to LaserActive in the mid-'90s, but the project was cancelled somewhere along the way. "It's like an urban legend," Krieger continues. "I know a couple of people who have one, but they're very early and they're not complete. So the most complete version of the *Myst* disc is kind of the lost treasure of the LaserActive, and I don't know if we'll ever find it."

Minter's *Tempest 3000*, a Nuon-exclusive sequel to *Tempest 2000* (which had enjoyed a PC release after the death of Jaguar), could sway a critical mass to adopt Nuon over PlayStation 2. Manne was there when it happened, watching his little fan community, Nuon-Dome, gradually shrink to nothing in the years after Nuon creator VM Labs filed for bankruptcy in late 2001.

An emulator called Nuance promised to revitalise interest, and indeed drove considerable spikes in activity at each release, but its sole programmer, Michael 'Riff' Perry, died of a brain aneurysm in 2007, aged just 32. "He was just a really smart guy who basically reverse-engineered this whole system and got it up and running on early 2000s PC hardware," Manne explains. "With every iteration it got better and faster, and you could run games to a certain extent on it, but it was pretty slow at the state it was in when he passed away."

Nobody else has stepped up to take on the task of emulating a system with half-a-dozen games and a few bits of homebrew, and Manne doubts that anyone will. The Nuon platform may die with its hardware, recorded in perpetuity by Manne's web shrine, which he now updates only once a year, such is the scarcity of Nuon-related news and developments. Nonetheless, the page contains just about every last fact regarding Nuon's short life.

The hopes of neglected systems such as Nuon rising from the ashes may rest on the work of arcade emulator MAME's sister project, MESS (Multi-Emulator Super System). Having being in constant development for more than a decade, it has drivers in various states of completion for over 700 computers and game consoles, including many from small regional markets. "There were always computers and consoles that were sold on local markets only," MESS coordinator **Miodrag 'Micko' Milanovic** says, "and most people were never aware of their existence. Our goal is to provide as much info about them [as possible] and try to emulate them to run available software."

For Milanovic, the initial draw was recording the existence of machines local to his native Serbia, such as Pecom 64 and Lola 8A. "For those, I did work from scratch and had [the] real machines beside me to help me figure out how it all works," he explains.

For some MESS contributors, though, preserving obscure systems is just a bonus. The real appeal for **Wilbert 'Judge' Pol** is simply figuring out how things work, a feat that he's accomplished on several well-known systems as well as Game.com, Exidy Sorcerer, Bandai Super Vision 8000 and "probably a lot more".



Not a console but silicon that could be added to DVD players, Nuon was picked up by few hardware makers

What unites the MESS team is a fastidious fixation on preserving in a single repository every computer and videogame system ever invented, and in making it possible for anyone to enjoy any machine, no matter how obscure. It's an extraordinarily ambitious goal, but these are many of the same people who have spent the past 17 years emulating nearly every arcade game ever in MAME, and their focus is shifting. "During the past few years, we actually hit the wall in MAME," Milanovic says. Little remains unsupported beside the newer, more powerful, and hence technically challenging, arcade systems released in the past decade or so.

Sega's Lindbergh arcade system counts among the few examples. Its relative newness – it debuted in 2006 and runs games such as *Virtua Fighter 5* and *After Burner Climax* – is part of ▶





From top, on right: Pecom 64 and Lola 8A computers were produced and sold only in Serbia



Saturn's complex architecture saw it struggle against PlayStation, while Apple and Bandai's ill-conceived Pippin console was an outright flop

the problem, but more still comes down to puzzling out the encryption module that features on its motherboard, which is going to take some time. Other systems go unemulated for all sorts of reasons. The most basic requirements for getting started are some example ROM dumps and knowledge of the system's processor, which is relatively easy for more popular machines. Official documentation is seldom available for obscure systems, though, so the next stage involves trial-and-error tests during which the developers try to recognise what the system is attempting to do. This can happen quickly, but often it's a gradual process.

Sega's Saturn, its failed PlayStation and N64 challenger, has had plenty of interested suitors and multiple emulators under development for several years (the current best being SSF, followed by Yabause). But fast and accurate emulation of the '90s console remains elusive. "Saturn is very annoying to make games on and even more annoying to emulate," MESS contributor **Angelo 'Kale' Salese** says. "It has two standard CPUs plus another for audio, and then also two video chips, another few subsystems and a microcontroller that controls the whole system." It's incredibly complex, and hackers are still unsure how some components work.

Saturn isn't the only system for which emulation has proven an uphill battle. "For the Tiger Game.com, we had a general description of the main chip in the machine and how its peripherals were used," Pol explains, "but nothing on the instructions of the CPU core besides a screenshot from a disassembler listing three or four instructions. I spent weeks figuring out the separate instructions by looking at the binary dumps of a few games."

"SATURN IS VERY ANNOYING TO MAKE GAMES ON AND EVEN MORE ANNOYING TO EMULATE"

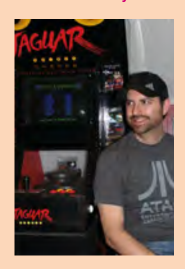
Apple and Bandai's ill-fated Pippin console still remains unemulated despite the fact that it ran a stripped-down version of Macintosh System 7.5.2 on the same processor as low-end Macs of the time. The MESS team has only done preliminary work on a driver for the Old World Power Macintosh ROM that it uses, and nobody else has risen to the challenge of emulating Apple's forgotten console, which saw fewer than 80 titles released, including Bungie's *Super Marathon* and numerous small applications. You can, however, run some Pippin games in Mac emulator Sheepshaver.

Progress in the world of emulation, whether it's of obscure systems or popular ones, is really just a matter of developer interest. If something gets too hard, or there's not much known about the underlying hardware, developers are liable to move on to lower-hanging fruit. MESS is no exception. "What it usually comes down to," Pol admits, "is [that] I'll pick up what I feel like doing. If I start having goals and planning what should be done when, then it'd start to feel like work. It is a hobby, and it should remain that way."

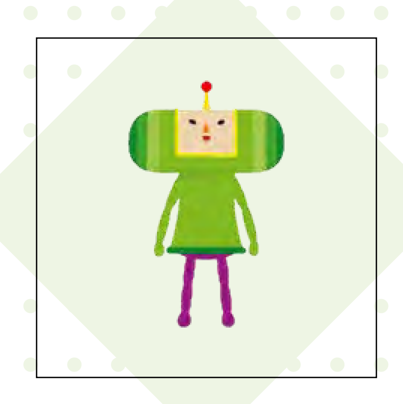
As for what drives his choice to work primarily on obscure systems, Pol is blunt. "It's not like the more obscure computers and consoles had the greatest games or apps. There's a good reason why those systems are not so well known. [But] the old media are deteriorating, and getting those games and applications preserved in some digital way is important to not lose those parts of history." ■

BIG CAT

Kevin Manne has an Atari Jaguar retail display kiosk in his home office. "I was in the process of buying one from California and having it shipped over [to upstate New York], because why not?" he says, laughing. "It was going to cost some ridiculous amount of money. Then I went into my local game shop and they had one. I was like, 'You want to sell it?' He goes, 'How much?' I said, 'I don't know... $150?' He says, 'Let me call my boss' and then comes back and says, 'Take it'. So I had this tiny little car at the time and I threw it in the back and drove home with it. Here it sits today."



THE MAKING OF...



KATAMARI DAMACY

How an earnest little prince and his demanding dad were rolled into one of PS2's most eccentric classics

By Daniel Robson

Format PS2
Publisher Namco
Developer In-house, Now Production
Origin Japan
Release 2004

Before he joined Namco in 1999, **Keita Takahashi** had no idea how to make a videogame. His speciality was not coding, and the models he made were not digital. But the cheerfully bizarre sculptures he crafted as a student at Tokyo's prestigious Musashino Art University held clues that one day this bright young artist would go on to create comedic action-puzzler *Katamari Damacy*, one of gaming's strangest treasures.

"To this day, I don't really know what art is, and I don't know why I studied fine art, but I just wanted to make things," Takahashi tells us. "I had to think hard about what sort of things I could get away with making while I was at university, and I decided that making things that could be used as tools was a way of them being relevant to everyday life. So I made a plant pot in the shape of a goat, filled it with soil, and when you watered it, the excess water would pour out from its udders."

Takahashi's goat sculpture had the desired effect. He noted the reaction from his teachers and peers as they laughed happily at his curious creation. Standing perhaps two or three feet high and with plants sprouting from its back, it was a collision of the real and the surreal, hilarious yet somehow affecting.

It was a moment that, though he didn't know it at the time, would set Takahashi on the path to making games. That could wait till he'd sculpted a hippo tissue holder and built a table that transformed into a robot, of course.

"I wasn't interested in being an artist; I just wanted to have a useful role in society," he says. "Perhaps volunteering for UNICEF would have been more useful, but making things is what I'm good at. I realised that videogames were a good fit, because just like sculpture, you craft something and hope that it will entertain people. And better yet, a good game can spread around the world, whereas a statue stays in one place. Also, I was interested to move from a 3D world to the flatness of a screen. So that's why I moved into games."

So Takahashi joined Namco as a visual artist. But despite taking an induction course in development and being deployed on a few prototyping projects as an artist, he struggled to summon an interest in flagship Namco franchises such as *Tekken*, *Ace Combat* and *Ridge Racer*. He found those games formulaic and uninspired, and floundered for two years before realising that what was missing from Namco's lineup was a flowerpot goat.



***Katamari Damacy*'s central mechanic of rolling up ever-larger objects to create new stars is inspired madness**

"I decided that if I wanted to work on a game I found interesting, I'd have to come up with it myself, and that's where the idea for *Katamari Damacy* came from," he says.

"I WAS NERVOUS – IT WAS MY FIRST TIME AS DIRECTOR ON A GAME – BUT I COULD VISUALISE WHAT I WAS AIMING FOR"

"I wanted to make something you could only do in a game."

The concept was delightfully ludicrous. After the charismatic yet arrogant King Of All Cosmos destroys most of the stars and planets during a drunken bender, it is up to the Prince – his diminutive, downtrodden son – to pick up the pieces. Literally. Heaving a sticky magic ball around homes and peaceful suburbs, the Prince must roll up objects of ever-increasing size, eventually growing his katamari to proportions that can repopulate the heavens.

The name conveyed the game's character perfectly. 'Katamari' means a 'cluster', 'clump' or 'bundle', while 'damashii' means 'spirit' or 'soul'. Together, it's an irreverent overstatement of intent, while the use of words with visually similar kanji offered a glimpse into the game's playful nature.

"The PS2 was released in Japan around the time I joined Namco, and there was a Sony launch game that I was excited about called *Densen* (*Power Line*), but which got cancelled," Takahashi says. "In that game, you used coat hangers to slide along an electricity cable like a zip line, which I thought was a wonderful idea, because it's a twist on something you'd see in everyday life. I realised that the world around me could be in a game, and that had an effect on *Katamari Damacy*."

Takahashi earned approval from his superiors and began production in late 2001, with a relatively low budget in the region of ¥100m (then roughly £570,000). For reasons he can't quite recall, Namco invited students from visual arts school Digital Hollywood University to help make objects for the prototype, but development on the proper game was split between Namco staffers and Now Production in Osaka.

"Altogether there were no more than 20 people, I think, and around half of them were outsourced: the programmer [Kazumi Yamabe] and the lead designer [Masatoshi Ogita] were from Now Production, and the [object and map] designer [Minori Kubota] was in Tokyo at Namco, so I kept going back and forth between Tokyo and Osaka," Takahashi says. "Around 90 per cent of the work was done in Osaka. I was nervous – it was my first time as director on a game – but I could visualise what I was aiming for, so it was just a matter of working towards it."

Since rolling up objects was the core gameplay mechanic, Takahashi wanted to have hundreds of items scattered around each area. That meant each object had to have the lowest possible polygon count so as to not overload PS2's limited system memory. The team looked for things that were simple in shape and that had some heft to them, but that wouldn't look awful without antialiasing. Inspiration came from the kitchen, the living room and the high street.

"The items were just everyday things that a Japanese person would recognise instantly and that would be fun to play with," Takahashi says. "We discussed using some real-world products, but I don't think we did in the end; we just made items that looked similar to real-world brands."

The physical attributes of each item were intended to alter that of the katamari, so that rolling up objects of an awkward shape would skew the ball's movements, but Takahashi is somewhat critical of the implementation. "We didn't use a physics engine at all," he says. ▶

"If we'd made it today with something like Unreal Engine, I wonder how it might have turned out."

Still, the effect came across. Roll an ocean liner or lamp post into the katamari and the clump's rhythm would change, while everyday items such as pencils, erasers and canned fruit – mixed with eccentricities such as sumo wrestlers, mermaids and Russian dolls – lent an easy charm to your growing bundle of stuff. Variation in size was key, too, with your katamari only able to absorb objects a little larger than itself. The visual style was key to the appeal, but so was the absurdity of hoovering up a stylised elephant or apartment block, the whole thing pitched somewhere between Taro Okamoto, Andy Warhol and Terry Gilliam, with the intro depicting stiffly animated dancing pandas, a psychedelic Mount Fuji, and a smattering of giant bouncing mushrooms, balloons and frolicking animals.

Another major part of the game's appeal was its soundtrack. At the time, Shibuya-kei – a genre of pastiche-pop born in Tokyo that was typified by artists such as Cornelius and Pizzicato Five – was just about passing, but it left in its wake a post-ironic fusion of leftfield electronica, bossa nova and jazz that meshed perfectly with *Katamari Damacy*'s anything-goes humour. Unusually for a game, most of the music had vocal melodies.

"I thought it would be fun to sing along while playing the game, which is why we decided to use vocal music," Takahashi says. "But we didn't have much money, so we looked for artists who weren't on a major label, more like B-grade musicians, to make the music." Among the better-known performers was Masayuki Tanaka, who sang the theme tune, Katamari On The Rocks, and was also known for the soundtracks to Ultraman and Kamen Rider TV shows.

And at the heart of it all was the endearing relationship between the Prince and the King Of All Cosmos. There's something tragicomic about the way the arrogant King berates his tiny heir at every opportunity, constantly telling him that his efforts in growing the katamari fall short. And in the face of this abuse, the Prince is inscrutable, his features never changing, as if determined to win the esteem of his father with one more level.

"It was just supposed to be comedic. I couldn't understand why other games didn't do things like that. I can't really explain where it came from," Takahashi says, admitting that he is often told that the Prince's vulnerability is what makes players want to root for him. "I never thought very deeply about the Prince's feelings. The King is so manly – he was based on Freddie Mercury and the Japanese ballerina Tetsuya Kumakawa. It's the body of a ballerina with Freddie Mercury's head."

After nearly two years in full development, *Katamari Damacy* was debuted at Tokyo Game Show 2003, followed by a Japan-only release on March 18, 2004. With marketing support from Sony, it snowballed, and while the first-week sales of 32,000 may not have been in line with Namco's ambitious forecasts, it was enough to secure a North American release that September. The game went on to sell 730,000 copies in those two territories and led to a PS2 sequel, *We Love Katamari* (released in Japan as *Minna Daisuki Katamari Damashii*), in July 2005, which marked Takahashi's final involvement in the series.

Future sequels and spinoffs followed on PSP, 360, PS3, DS, iOS, Vita and even Japanese feature phones, many of which have hewn close to the original, retaining sound effects, visual cues and even a policy of introducing rising pop-fusion music acts, such as female rap duo Bakubaku Dokin for Vita's *Touch My Katamari*.

"I've never played any of the sequels," Takahashi says. "I'm not interested. It's too scary." Far from feeling flattered that Bandai Namco has stuck to his original concept, he believes it shows the same lack of imagination that he was pushing against when he created the game.

If Takahashi sounds like something of a contrarian, he is. As he speaks, he denounces the industry, both the majors and the burgeoning indie scene that is so reminiscent of the PS2's golden era of weird Japanese games, while developments that you might expect him to embrace, such as Nintendo's GamePad and Kinect, do not interest him at all.

"Gaming hasn't been around very long, so devices like that are unnecessary," he says. "They're nothing but a diversion, created for business reasons. Motion control is only fun because moving your body is fun. I'd rather people find the game itself the most fun part."

And yet he is currently working on his first (and still unannounced) console game in years, after earning more critical acclaim for his charming PS3/iOS oddity *Noby Noby Boy* and last year's *Tenya Wanya Teens*, in which your shy adolescent character might accidentally urinate on a girl to whom he'd intended to confess his affection. Reliant on a custom controller, only one *Tenya Wanya Teens* cabinet currently exists, but it may yet see a release on "major platforms".

As for what he learned from making *Katamari Damacy*, Takahashi tells us there were two main lessons. "I learned that the idea is the most important thing," he says. "There are still so many things that haven't been done and games that haven't been made. [Looking for objects to include] also made me realise how much stuff there is everywhere. Human beings are such hoarders, especially in Japan. There's so much stuff at a 100-yen shop, convenience goods that don't exist anywhere but in Japan. It's like, how convenient does everything really need to be?" ■

Q&A

Keita Takahashi
Director, *Katamari Damacy*

How closely did *Katamari Damacy* resemble your original concept?
It didn't change at all. That's what my boss at Namco [Mitsutoshi Ozaki] told me when he played the finished game.

It did very well for a debut game, right?
I was surprised that it became so popular – it sold more than I'd expected. I was especially amazed that it did so well overseas, because it's such a Japanese-style game. In terms of gameplay, I think it transcends the language barrier, and I thought it might possibly do OK overseas, but it far surpassed my expectations.

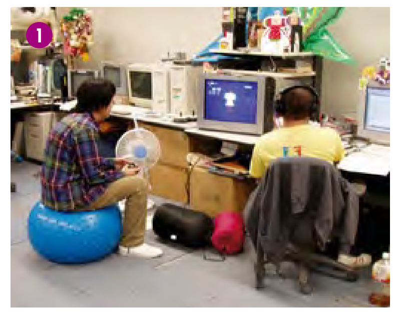
Do you remember why there was no European release?
It was because of the PAL/NTSC conversion problem. Right at the start, we unfortunately decided to make it NTSC-only, and we were unable to convert it to PAL later. It's such a pity.

It's still an unusual game. Why do you think there aren't many similar games today?
I wonder why. I don't think it's such an out-there game, it's just that the game industry in general isn't out-there enough. There aren't many other out-there games, so it sticks out.

Do you think games are too serious?
I don't play much these days. Something I've realised while living in the west is that westerners see games like we see drama series in the east. Humour is hard to pull off, and it comes in so many flavours. For example, I've never played *Saints Row*, but it seems that the type of humour is very different than that in *Katamari*. I want to make people laugh through the gameplay itself.













1 With a small team and a lot of content to make, *Katamari* required long working hours, as all the sleeping bags attest. But these messy desks display the sense of fun that lends it enduring appeal. 2 The sculptures that Takahashi made while studying at Musashino Art University included a hippo tissue box and a table that could be transformed into a robot. 3 The game was presented in a range of bizarre and grotesque art styles that were nonetheless filled with warped humour. 4 The egocentric King Of All Cosmos and his long-suffering son, the tiny Prince, wove a hilarious but heartbreaking storyline of filial tragicomedy







STUDIO PROFILE

BUGBEAR ENTERTAINMENT

After 13 years in publishers' pockets, Helsinki's racing specialist is going it alone

By Michael Gapper

Bugbear's founder and managing director, **Janne Alanenpää**, has been making racing games for almost 20 years. "Finns have racing in their blood," he says. "If you want to win, take a Finn."

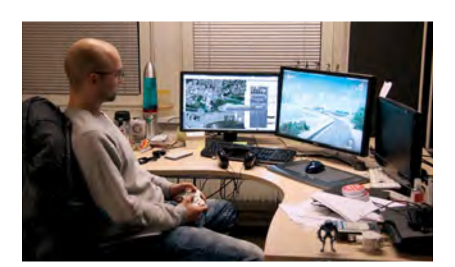
Bugbear could use a win right now. *Next Car Game*'s Kickstarter was a few hundred thousand dollars from meeting its $350,000 goal when the studio decided to cancel the crowdfunding drive, and PC/PS3 freebie *Ridge Racer Driftopia* has been widely criticised for its F2P model. Rights to *FlatOut*, the series with which the studio made its name, were lost in the collapse of publisher Empire and sold to Strategy First. It handed the keys to Team6, which made *FlatOut 3*, the second game in **Edge**'s history to record a review score of 1. At a time when development in Helsinki is booming, Bugbear deserves better.

"The company was founded by me, [technical director] Tatu [Blomberg] and a couple of my friends in 2000," Alanenpää says. "Nobody really knew games in Finland back then; there was only Remedy, Housemarque and then us. In late 1999, I was raking the leaves in the garden I shared with my neighbour and I said I was planning to leave my current job and might try to found a new game company. My neighbour said, 'Do you need money?'

"I was a producer and a game designer in another company [Carts Entertainment] that went down after releasing one game [*Thrust, Twist + Turn*]. My neighbour gave me a small amount of money, and they're still the owners of Bugbear to this day. We started pitching right after that. In our previous company, Tatu and I were working on racing games and we had often talked about how it would be nice to create a rally game. So we started working on the 3D engine and car physics, founded the company in March, and after six months we went to the European Computer Trade Show [ECTS] in London. There were really good parties back then."

Today, Helsinki is a game development capital and home to giants such as Supercell and Rovio. Housemarque and Remedy cut lucrative deals with Sony and Microsoft, but Bugbear's early publisher, Empire, made a series of bad decisions that eventually saw it liquidated.

"*FlatOut* has sold over three million units and when [Empire's parent company, Unistar Holdings] went to the NASDAQ stock market, they said *FlatOut* has made over 50 million US dollars. We received a couple of million for development costs, but we have never received a cheque from the success of that game. That's



Despite being comprised of only a 30-man team, Bugbear has matched or bettered far bigger developers for physics

why from now on I want to create a smaller game [that we own], and I want to make sure the players are happy, and hopefully we'll get some royalties as well."

Before the studio's *FlatOut* games, Bugbear developed PC racer *Rally Trophy* for JoWood Productions and set the standard for what would become the studio's speciality: physical, heavyweight racing powered by a robust physics engine. That engine, developed by Blomberg for *Rally Trophy*, has formed the foundation for every game Bugbear has ever made, bar one.



Founded 2000
Employees 30
Key staff Janne Alanenpää (founder and managing director), Tatu Blomberg (founder and technical director), Janne Suur-Näkki (game designer)
URL www.bugbear.fi
Selected softography *Rally Trophy, FlatOut, Sega Rally Revo, Ridge Racer Unbounded*
Current projects *Next Car Game*

"We released the prototype of *FlatOut* from 2002 on our website," Alanenpää says. "Some guy hacked the prototype and removed the assists and said, 'OK, *now* it's a good game'. You could do that for *Ridge Racer* as well – remove all the arcade stuff and it would be more like a *Forza* or *PGR* experience.

"We wanted to create the best rally game. We didn't listen to anything regarding the history of rally games… Car games with real cars seemed to sell, but we just wanted to make the gameplay as good as possible."

"THEY SAID FLATOUT MADE OVER $50M, BUT WE HAVE NEVER RECEIVED A CHEQUE FROM THE SUCCESS OF THAT GAME"

"Unfortunately, our *actual* first game was not a racing game," Alanenpää says. "We created a [never released] game called *Hat Trick Hockey* and we were actually discussing it with a couple of companies before we focused on *Rally Trophy*. Still, it was a fun game of one-on-one hockey, and Tatu programmed his own cheat codes into it because he was losing all the time."

Bugbear followed up with a second PC racer, *Tough Trucks*, for Activision before enjoying its first console success with *FlatOut* on Xbox and PS2. At its core was that physics engine from 2000, with thirdparty Havok physics powering only the ragdoll driver after a collision. With Bugbear's tools, developers can tweak every variable relating to a car's handling, from peak torque to suspension camber. It's an engine built to be as flexible as the studio needs it to be, whether simulating muddy demolition derby in *FlatOut*, high-speed road racing in *FlatOut 2* and its 360 remake *Ultimate Carnage*, or arcade drifting in *Ridge Racer Unbounded*.

Alanenpää and the team knew when day-one sales came in that *FlatOut* wouldn't be a major hit. "We never got the [sales] feedback, but we put all our blood and time into *FlatOut*. It was fun working with Empire, but they had their own troubles." Empire unsuccessfully pitched three *FlatOut* games into a market dominated by *Gran Turismo*, *Burnout* and *Project Gotham Racing*, and found the physics gimmick wasn't a strong enough sell. The majority of Bugbear's work has been similarly low-key; it handled Sega's 2007 *Sega Rally Revo* port for PSP and produced *Glimmerati* – another racer – for N-Gage in 2005. Still, there's justifiable pride in everything Bugbear has accomplished with its small team over the past 14 years.

"We used Umbra for occlusion and Havok for character animation in *FlatOut*, but otherwise all the technology is made by us," Alanenpää says. "Everything you see is made by us, from car physics to rendering to audio and menu systems. *Rally Trophy* was made by 12 people, *FlatOut* was made by 20 people, *Ultimate* ▶





For *Next Car Game*, the Bugbear team acquired texture references from a real dirt track on race day and spent a day wrecking cars to get references for how real vehicles deform under stress. *Next Car Game's* deformation model is currently second to none in videogames

Carnage was for the next-gen [at the time], and we had 25 people. If you compare us with Codemasters and other studios, they have teams two or three times our size. At ECTS, we met Nvidia, who were working with the lead programmer on *Colin McRae*. He looked at our demo and asked, 'How big is your team?' We had four guys. Codemasters had 45 guys working on *Colin McRae*. He asked, 'How many programmers do you have?' One. We had one. He made everything."

2012's *Ridge Racer* *Unbounded* was the studio's biggest production to date and the biggest brand it had ever handled. "[Scaling up on production] isn't as easy as it used to be," Alanenpää says. "Because of Supercell and so on in the market [for talent], it's hard to hire people. But we spent a lot of time with *Ridge Racer* developing the technology and the art pipeline. We outsourced art assets to China and our cars were made in Vietnam by some of the same guys who made cars for *Forza*. We had about 55 in-house and about 30 outside."

"*Ridge Racer* is kind of an arcade game, but even those physics are based on our simulator," says designer **Janne Suur-Näkki**. "The beast is contained, but it's still there."

Eight years after the studio saw *FlatOut* limp onto shelves, *Unbounded* also sank on day one. "*Ridge Racer* [didn't exactly] die," Alanenpää says. "But you could see that it wasn't going to fly, too. Of course, it's hard to succeed without the brand, but I still think creating a new brand is more interesting than making sequel number four, five or six. I think most publishers are scared, and that's why they want to use a brand like *Ridge Racer*… They think it will help sell more copies, but I think you just need a good game, a good focus and a good story. It doesn't matter if the game is a sequel."

Next Car Game (still a working title) would almost certainly have been *FlatOut 4*, though, if Bugbear had the rights to the name. Officially the studio's ninth game, announced as it was just before *Ridge Racer Driftopia*, *Next Car Game* is the studio's first new major brand since *FlatOut*. Deemed 'soulless' by some critics for its payment model, *Driftopia* is a key part of Bandai Namco's ongoing experiment with free-to-play, joining *Soul Calibur*, *Tekken* and *Ace Combat* among its major brands given an F2P makeover and receiving possibly the worst treatment of all of them with its premium-priced 'repair kits', necessary for putting the car back on the road after every crash. In *Driftopia*, you'll crash a lot.

But it's *Next Car Game* that signals the start of a new era at Bugbear, born of Alanenpää's desire to control the studio's destiny. Already available on Steam's Early Access programme, it's a game that's growing with the community.

"Now we have got back to our roots again," Alanenpää says. "And we hope it meets even a small niche market for the kind of game we want to create. With *Next Car Game*, we can release [on] Early Access with a couple of cars and a couple of tracks, and we can develop the game together with the players to expand the game.

"In traditional games business models, you're more like a hired killer. You do that project and that's it, then you move on to the next. We've been working with publishers for years and we're still open to discussions with them, but we want to control our destiny regarding business models, monetisation models, IP ownership, marketing, and product. We want to create games that gamers want to play, with no marketing [influence]. I personally feel that sometimes publishers forget why they're creating games. You start to look at a lot of data from the marketing department and you forget who the player is. What do they expect to have in the game? Marketing is a good thing, but still we need to listen to players first about what they want.

"Games should be a kind of service, not just a product. Our customers are players and they're involved… Hopefully, if *Next Car Game* succeeds, then we can support them and make them happy for a long time." ■

"IT'S HARD TO SUCCEED WITHOUT THE BRAND, BUT I STILL THINK CREATING A NEW BRAND IS MORE INTERESTING"

"I think the problem with that game is pretty much dictated by our publisher," recent departee and ex-technical art director **Timo Kämäräinen** says. "It's funny, in [the eastern market] they [accept] a pay-to-win kind of game, because they want it to work like that."

"They're [trying] some different things, testing the players to see which work and which don't," Alanenpää says. "I think sometimes during the development it has been challenging to convince them that it doesn't work, but we understand they want to test it. It's sometimes hard for us as developers to understand the Japanese guys and the way they design. It's good to see they're trying that kind of thing, rather than [being] like an EA, who are making kind of safe bets all the time. In [Japan], they are trying different kinds of things, and we learn from them as well."



➊ *Next Car Game*'s cars are rendered inside and out, and take "three or four times" longer to build than a *Ridge Racer Unbounded* vehicle. ➋ *Sega Rally Revo* was the sole game from Sega's UK driving studio, but Bugbear built the PSP conversion. ➌ *FlatOut 2* featured a cast of rival drivers who could be propelled from their cars with a solid head-on collision. ➍ *Ridge Racer Unbounded*'s car models were the studio's first attempt at outsourcing

PLAY

REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Titanfall 360
It was tempting to assume Bluepoint's port of the Xbox One system seller had a later launch date because it was awful, but perhaps it was being held back for the opposite reason – this is the same game in all but texture resolution. Creeps are as smart as ever, which is to say entirely brain dead, but battlefields bustle with Pilots and Titans, and the gunplay is wonderfully tight. Lock the framerate and prepare your Burn Cards: 360 isn't ready to be buried yet.

NBA 2K14 PS4
The star of 2K's peerless basketball sim is MyCareer, in which you control a rookie on the path to stardom. Between games, a Twitter-like feed sees fans, pundits and players offer feedback and challenges. Shutting up the mouthy NBA legend who criticised our lack of steals with an all-star defensive performance and a career-best 51 points brings a feeling of achievement far greater than the XP that follows.

FTL: Advanced Edition iOS
The new weapons, systems and events already warrant a return trip, but iPad proves to be as perfect a new home for *FTL* as it was for *SpaceChem*. So much so, in fact, that it's difficult to think of this as a port. And the new Hard difficulty, which makes enemies tougher and lowers your scrap rewards, is a fitting match for the part of us that keeps burning Bonfire Ascetics and attempting zero-fault *Trials Fusion* runs.



Explore the iPad edition of **Edge** for extra Play content

REVIEWED THIS ISSUE


100 Mario Kart 8
Wii U


104 Trials Fusion
360, PC, PS4, Xbox One

108 The Elder Scrolls Online
PC, PS4, Xbox One

112 Kinect Sports Rivals
Xbox One

114 Child Of Light
360, PC, PS3, PS4, Wii U, Xbox One

116 Hearthstone: Heroes Of Warcraft
iOS, PC

118 Kirby: Triple Deluxe
3DS

119 Mercenary Kings
PC, PS4, Vita

120 Fract OSC
PC



www.edge-online.com
Up-to-the-minute reviews and previews

Fourplay

Local multiplayer is enjoying something of a resurgence at the moment, but it's the developers with the fewest resources, not the old hands, that are leading the way. Games such as Matt Thorson's *TowerFall: Ascension*, Beau Blyth's *Samurai Gunn* and Mark Essen's *Nidhogg* look to the past not only for visual inspiration, but also in the way that they make what's happening in front of the screen – the frustrated cries, the victorious yelps, the not-quite-sporting shoulder barges – as important as what's happening onscreen.

So why are big studios still prioritising online modes over the simple pleasure of letting people play in a room together? *Trials Fusion* (p104) boasts one of the most competitive online infrastructures around, given life by a deeply nuanced control scheme and the presence of your friends' ghosts every inch of the way. But fire up local multiplayer and you'll find an undernourished offering that undermines that moreish handling with a sloth-like pace and unbalanced vehicle selection. In short, it feels like an afterthought.



At least RedLynx can put its slips down to *Fusion* being the studio's first simultaneous multiformat release. Nintendo's only excuse for *Mario Kart 8*'s (p100) lacklustre local fourplayer racing is hubris. The underpowered Wii U simply isn't up to rendering four instances of the game's beautiful tracks, and the framerate plummets when it's made to try. But it's Battle Mode that suffers the most, this being the first home console version in the series to drop bespoke arenas. These are tiny dents in an otherwise immaculately polished game.

When even Nintendo focuses its efforts on online multiplayer over couch duelling, it's a worrying precedent. Hopefully, as studios get to grips with new technology, the larger, well-funded teams will take indie developers' lead, instead of forcing us apart in order to play together.

Mario Kart 8

First things first: it's going to be difficult to return to previous *Mario Karts* after this. Even 2011's effervescent 3DS outing, *Mario Kart 7*, feels somewhat lifeless by comparison. The new HD visuals are gorgeous, but Nintendo has also built on 7's neatly interlaced mechanics and introduced a nuanced handling model to create the greatest *Mario Kart* yet.

But don't fret: things aren't so different that you won't feel immediately at home. Drift boosting is still an essential, adrenaline-spiked technique, and the same is true of drafting and stunts (hit the jump button after cresting the lip of a ramp or other object and you'll get a little kick of speed in return). But while 7's drift was immediate, the first time you try it in *8* will likely see you sail clean off the tarmac due to the karts' new-found inertia. It takes a few corners to get used to, but is quickly revealed to be a deep and rewarding system – pulling off an apex-kissing drift around a tough corner is an uncommonly potent dopamine hit.

A more controversial addition is the spin boost, which can only be used on *8*'s new antigrav sections and delivers a slug of thrust simply for bumping into other racers or the pinball-style bumpers that often dot these sections. It's far from the balance-ruining calamity it may seem on paper, and usually favours the faster, or at least more aggressive, kart in much the same way clattering into an opponent with your wheels planted on the ground does. But with spin boost, there's a good chance both parties will receive a speed increase, meaning it must be strung together with other techniques in your repertoire to be effective.

And if driving skill fails you, you can always fire off a volley of Red Shells. *Mario Kart 8* introduces three new items (if you don't count the upgraded Lucky Seven, which becomes Lucky Eight here). The Boomerang works as expected and can be flung three times at, or ahead of, other racers to stall them; the Piranha Plant plonks gnashing greenery on the bonnet of your kart and gives you a boost every time it chomps a coin or opponent; and the Super Horn emits a shock wave around you, sending karts flying and deflecting projectiles – yes, that includes the Spiny Shell.

Control options have been broadened, too. Now you can choose to steer using the D-pad, or even handle the throttle and brake via the right analogue stick. In addition, motion controls – using either the GamePad or Wii Remote with steering wheel attachment – finally feel like an effective way to play. We tried both motion-control schemes on the tough 150cc races and managed to win with each one. It's worth noting, however, that the heft of the GamePad makes it feel slightly less responsive than the lighter wheel.

Mario Kart 7's penchant for alternative routes is retained, with some of the tracks branching repeatedly out in front of you like a family tree. The glider and underwater propeller transformations are both given new life by weightier handling, but joining them is the new antigrav transformation, which sees karts tuck their wheels up like a DeLorean time machine whenever you pass over a glowing blue strip. It comes with the ability to stick to walls or inverted sections of track, and this has done for *Mario Kart* what *Galaxy*'s rejection of tradition did for the 3D platformer: freeing course designers from adhering to the boring rules of gravity and resulting in locales of spectacular imagination.

Publisher/developer Nintendo
Format Wii U
Release May 29 (JP), May 30 (EU, US)

If Mario Kart 7's new tracks made older circuits feel planar, then 8's makes them feel positively one-dimensional



Shy Guy Falls takes place in a rocky canyon and begins in a comparatively restrained manner. Then the track detours straight up a huge waterfall and twists back on itself to send you plummeting down, flinging you into the air to glide to safety just before you hit the foaming plunge pool at its base. At one point during Bowser's Castle, you have to avoid its owner's fists as he looms over the track, pummelling the roadway and sending ripples down its length before a stomach-churning turn sends you downwards and between his legs. Mount Wario, meanwhile, sees you descend a snow-covered mountain that takes in a slalom, a ski-jump and a sideways dash across the face of a dam along the way. If *Mario Kart 7*'s new tracks made older circuits feel somewhat planar, then *Mario Kart 8*'s makes them feel positively one-dimensional.

On later tracks, alternative paths offer a choice between rubber and antigravity, an addition that's particularly welcome in the rejigged Toad's Turnpike, where you're able to hop on the wall and circumvent the traffic. *Mario Kart 64*'s divisive track is still yawningly wide, but for the most part Nintendo's designers have kept circuits tight and fraught.

You can take the time to appreciate their work free from the stress of fending off attacks in Mario Kart TV, a highlight reel that you can choose to watch after each race. The action can be slowed down or sped up using the sticks, and you can tweak the settings to make MKTV focus on different things, such as items, drifting or hits. You can also choose which drivers to feature (it will default to including everyone who competed), and set the clip to last for 30, 45 or 60 seconds, or to play out the entire race.

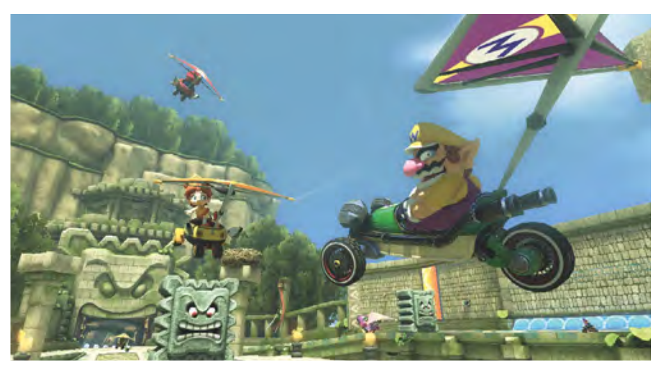
Whichever algorithms are at work behind the scenes, MKTV has a keen eye for drama. During one replay, the camera focuses on the banana skin gripped by Mario as we barrel around a banked corner. Once thrown, the camera sticks with the weaponised peel as Mario disappears from frame, only to cut to Peach, pulling focus as she runs into it. We slow the action manually at this point to bask in her tumbling defeat. Another playback sees the camera switching its attention from Yoshi's kart to the Red Shell we loosed, before a fade cut to the same shell a second away from ▶



LEFT All of the online modes can be played in twoplayer splitscreen, and the offline GP mode can be completed with a friend or three. **BELOW** Thwomp Ruins is a dash through a crumbling Aztec-style temple, all while trying to avoid being crushed by the titular blocks. There are some vertiginous drops, and it's worth noting that Lakitu is now quick to catch you if you fall. **MAIN** Pilots have more to worry about than bird strikes at the busy Sunshine Airport. The track also features one of *Mario Kart 8*'s most memorable moments, where you leap into the air and then accelerate past a plane taking off



ABOVE Bikes are considerably less weighty on track than in *Mario Kart Wii*, and respond faster to drift manoeuvres. Their lack of the karts' satisfying understeer means you'll find yourself turning too tightly at first, however



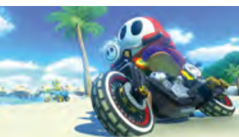


its victim. The camera then waits so it can capture us spin-boosting off the stricken kart. MKTV quickly becomes almost as addictive as racing.

Your edited highlight reels can be saved and watched in a theatre accessed from the main menu – from which you can also view your friends' reels and the most popular or recent clips from around the globe – and you can also upload your efforts directly to YouTube. It's a surprising, but entirely welcome, volte-face after last year's uproar when Nintendo filed copyright claims against users who had created YouTube videos featuring its games.

Mario Kart 8's progressive approach to the Internet continues in online multiplayer, which now allows up to 12 players to compete in one-off races or Tournaments. The latter expands upon *Mario Kart 7*'s Communities and allows owners to set custom rules and choose how long it will run for. When you create a Tournament, an associated Miiverse community will automatically be generated so that you can stay in touch. If you prefer to compete from a distance, you can upload your ghost data, race against others' ghosts and watch leaderboard-topping performances to improve your own driving.

Local multiplayer is good, too – at least in certain conditions. Twoplayer splitscreen is all but indistinguishable from a singleplayer race – we didn't notice significant loss of detail or any dips below 60fps – but Wii U starts to wheeze when there are four players to render. It's not unplayable, but nor is it particularly stable, either. *Mario Kart*'s Coin Battle has been dropped (though coins are still present in the Grand Prix and holding ten will increase your top speed), but so, more disappointingly, have Balloon



KARTISTRY

Super Mario 3D World's visuals were revelatory, but *Mario Kart 8* takes things even further. Chrome bumpers gleam in the sunlight, headlights flick on in tunnels, sparks arc from antigrav impacts, damp tracks glisten (and so does Donkey Kong's fur after a dip), and Mario's moustache flaps playfully in the wind. This universe has never felt so alive, and every track is filled with detail. Crowds of characters cheer you on, throw coins or participate in track-side raves, while racers punch the air and eye each other up with a cheeky competitive spirit. The absence of *Mario Kart 7*'s firstperson view option will barely register, since watching your driver's reactions is so entertaining.

The waterfalls in the background are part of the track, racers deploying their gliders after rocketing down the one on the left. With gravity out of the equation, Nintendo takes every opportunity to up the scale of its tracks

Battle's arenas. Instead, you must attempt to deplete your opponents' balloons on one of eight standard race tracks, each one stripped of its antigrav sections.

The *Mario Kart* series' battle arenas were designed to funnel players into each other, but now you'll spend long stretches of time without even catching sight of a potential target as you trek round the circuit, hoping someone's driving in the opposite direction. It's not about points this time, rolling back to the original game's rules of simply trying to retain your balloons. You're not quite out if you lose them all, however. Instead, you become a ghost – invisible to other players, but still able to deplete their balloons, and it's annoying as that sounds. Even with CPU drivers set to Hard, we were able to park our kart at the side of the track and wait out the three-minute match without being targeted once. It's not a strategy that flies with human opponents, of course, but the decision to drop arenas is nonetheless a confusing one.

But even this isn't enough to detract from an otherwise-joyous follow-up to the series' excellent 3DS outing. That it offers as much of its own innovation again speaks volumes; *Mario Kart 8* is as essential a purchase as *Super Mario 3D World*. Whether it will give Nintendo's console the sales boost it so desperately needs is another matter, but the famously cloistered company is at last giving its players the opportunity to reach beyond the Miiverse with its YouTube uploads. However it plays out, *Mario Kart 8* is yet another overwhelmingly powerful argument in favour of the company's idiosyncratic approach to design.

9

Post Script

Kosuke Yabuki, project leader, Nintendo

Since he joined Nintendo in 2005, **Kosuke Yabuki** has worked on *The Legend Of Zelda: Twilight Princess*, *Mario Kart Wii*, *Mario Kart 7* and *Nintendogs + Cats*. Here, he discusses squeezing HD visuals out of Wii U, designing Mario Kart TV, and the decision to remove arenas from Battle mode.

How did being freed of gravity's restrictions change your approach to course design?
We had tracks that rose and fell a little in previous *Mario Kart* titles, but essentially they were designed on a level plane. With the introduction of the antigravity mechanic, we started designing tracks to make use of all three dimensions. We built Mario Circuit and N64 Rainbow Road so players will catch some great views of castles or skyscrapers in the upper portion of the screen, heightening the sense of racing upside down.

Was it a challenge updating these classic courses?
A lot has changed since these courses first appeared, from kart behaviour to the camera and even the number of opponents, so we had to redesign the courses both in terms of their spatial layout and even the width of the tracks. We've also added in the antigravity, gliding and underwater mechanics, too, and the graphics and sound are all remade from scratch. But I hope these courses will still bring back some fond memories.

***Mario Kart 8*'s vehicles handle beautifully once acclimatised to, but did you ever worry about the risk of making the game less immediate?**
This time around, we really did add in a lot of new elements, but we also aimed to do away with explanations or tutorials as much as possible. The *Mario Kart* series cherishes both depth and breadth of gameplay; it's broadly accessible and anyone can pick up a controller and start playing, but at the same time the games are also deep enough that players can achieve greater results through practice. Each time we make a *Mario Kart*, we make everything from scratch: programming, graphics and even the audio. Even if we're making something similar to what was used in a previous title, it will be different because of the person doing it. We think this subtle change is crucial.

Why did you reinstate the D-pad control option?
The Wii Wheel supports both [D-pad] and motion controls. We've honed them so that they both give a great racing experience, and users can select whichever they prefer. We did the same for the right stick on the GamePad as well. Letting users move the right stick to accelerate gives them a different feel to pressing the A Button. Having said that, it's not simply about the quantity of control options; we experimented with a lot of different control methods, and only the ones that we found worthy made it through.



"Each time we make a Mario Kart, we make everything from scratch: programming, graphics and even the audio"



How far do you think you're pushing the hardware?
Our aim was to create a game that used HD graphics and played at a smooth 60fps. We pushed Wii U's capabilities to their limits to achieve this. [But] I think it still has a lot of potential left, and I suspect there are more ways to make use of its capabilities that we haven't even imagined.

Mario Kart TV's AI editor has a keen eye for drama and framing. How difficult was it to design?
Mario Kart 8 automatically creates highlight reels based on a number of elements, including the way the race develops, the way items are used, as well as changes in position. It may look fairly simple, but we spent a lot of time to make it what it is. In twoplayer multiplayer, the AI focuses on moments that show the relation between these two players... I think it creates a really nice, enjoyable video, even if it does look simple.

The YouTube upload feature suggests a change of thinking at Nintendo. What made you decide to support sharing videos this way?
When we were preparing the automatic highlight reel feature, we wanted users to share these videos with others, not just watch them by themselves. For example, after uploading a reel to YouTube, you can re-watch the highlights of your online battle the next day in your office, or at school or even on your smartphone. It will definitely encourage people to keep playing, and may be a great way to invite others to join you for a game.

Why did you replace arenas with tracks in Battle mode? It's naturally suited to an enclosed space.
We've changed the style of Battle mode for *Mario Kart 8* to use circuits that lots of people can play on. Players won't know when a rival will appear from around a corner, which will bring a new sense of excitement and strategy to this mode. In terms of rules, we designed it for playing with 12 players, including the CPU. In the beginning, you have to defeat the CPU players and earn your score, and towards the end it becomes a battle between just human players. That's the real thrill of it! It should also be a fresh experience for users to be able to race backwards around the circuits they are familiar with. I'm sure there will be a few people who aren't so sure about us moving away from how we've done things previously, but I hope they try it out for themselves first. I'm sure it will be a new experience for everyone, [and] like no other battles in *Mario Kart* before. ■

Trials Fusion

Publisher Ubisoft
Developer RedLynx
Format 360, PC, PS4, Xbox One (PC, PS4 and Xbox One versions tested)
Release Out now

The *Trials* series isn't really suited to sequels. DLC, sure, and perhaps the occasional reboot to freshen up those visuals, but RedLynx pulled off such a perfect landing with *Trials HD* back in 2009 that each attempt to better it is increasingly dangerous, and *Fusion* comes perilously close to losing its balance.

Tampering with the core bike riding in any new iteration is out of the question, which leaves RedLynx with two options: release more of the same, or release more of the same with new things bolted on. *Evolution* leant towards the former, sharpening up *HD*'s clunky level editor, polishing the visuals, and introducing more varied environments and local multiplayer. *Fusion* also adds lacquer, but is a good deal braver, experimenting with four-wheel-drive quad bikes and a physics-based trick system. The result, sadly, is that it feels fractured.

Thankfully, the *Trials* game at the centre of all this innovation is as good, and as viciously challenging, as it's ever been. *Fusion*'s tracks are some of RedLynx's best yet, and series fans will feel at home instantly as they shift their rider's weight to keep that back wheel planted. Newcomers are well looked after, too, and each tier of the career mode opens with a clear and concise tutorial that talks riders through the basics as well as more advanced techniques. There should be no excuse for not knowing how to bunnyhop this time around.

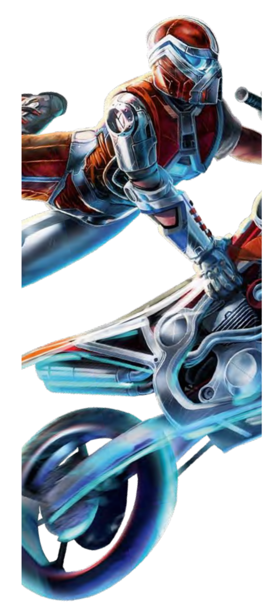
It's also the best-looking *Trials* yet. While the series' aesthetic has previously been somewhat utilitarian, *Fusion*'s futuristic setting proves its most successful and consistent look to date. Tracks blend dazzling metallic architecture with the organic mud, dirt and rock structures of *Evolution*. The huge draw distances and increased geometry appear to be weighing heavily on the engine, though, and there's an alarming amount of texture pop-in when you begin a race, or restart it after making some progress, as well as some migraine-inducing polygon strobing in places. Your bike selection will have been made long before the model loads in on the menu, too, which is a shame given that your rides – as well as your rider – are fully customisable, with body kits, wheels and new outfits to purchase with your race earnings. Xbox One owners will once again have to settle for a much lower resolution than those playing on PS4, but at least that trade-off ensures that *Fusion* is in no danger of becoming the first console *Trials* game to dip below 60fps.

Fusion's headline addition is its new FMX trick system, which is introduced early on in special events that take place on purpose-built tracks. Rather than rely on button presses or combinations, RedLynx has opted for an organic control scheme that loosely resembles *Skate*'s Flick-It system. Your rider's pose is controlled with the right stick, so you push left to do a Superman, for example, or trace an arc from left to right to lie flat in front of the handlebars for a dead body. The longer you hold each trick, the more points you accrue, and these scores can be further increased by adding front- or backflips into the mix, or even simply performing wheelies and endos between jumps.

It's pleasing enough at first, but while the FMX controls are intuitive, they're rarely precise. Inputs are relative to the bike's orientation – pulling the stick down when the bike is level makes your rider stand proudly on top of his ride, but do so with the bike pointing up and he'll hang down from the handlebars. Given *Trials'* trademark inertia, orienting your bike correctly is fiddly and it's easy to fluff the move you were going for and do something else entirely. That's especially problematic if it happens to be a repeat of an earlier trick (which harms your score), or you fail to achieve anything more than briefly writhing limbs. It's telling that the score thresholds for gold and platinum medals for FMX events are the lowest in the game.

Another new addition is the all-terrain vehicle (ATV), a lumpen, brutish machine that eschews the bikes' nimble grace for powerful four-wheel drive. Quads feel perfectly suited to the *Trials* beginner, providing a low-risk option for hill climbs and landing jumps, but they turn up halfway through the campaign. They're neither as responsive nor as satisfying as even the least powerful trials bike, and feel extrinsic to the package. The tracks given over to the quads can't be attempted with a bike, either, and *Trials* purists may find themselves resenting the resources that were dedicated to ATVs rather than additional bike courses.

Purists may find themselves resenting the resources that were dedicated to ATVs rather than additional bike courses



Local multiplayer is under-resourced, too. With only ten race tracks, repetition soon leads to fatigue, and while *Evolution*'s equivalent felt comparable to the main game, the pace of *Fusion*'s multiplayer is inexplicably hobbled to the point that your bike handles like it's moving through syrup. Those choosing an ATV will find themselves at an advantage as well, with ramps easily demolished and landings almost impossible to get wrong when four wheels are delivering power. It all feels like it was included out of a sense of obligation rather than any real desire to raise a smile, let alone the pulse.

Head-to-head online multiplayer and live ghost racing aren't available at launch, but will be added in a free update down the line, along with what RedLynx promises is a completely new type of multiplayer for the series. A yet-to-be-activated Tournaments tab on the menu screen promises bespoke online events and leagues. Post-release DLC is also promised – we're still holding out hope for a local turn-based Skill Games league – but whatever content RedLynx adds to the game in the weeks and months following release is certain to be dwarfed by the contributions of its fanbase. Over 700,000 tracks and minigames were made using *Evolution*'s editor, after all. ▶



ABOVE ***Fusion*** **offers up fantastic views across a varied selection of environs, although you'll often be concentrating too hard on lining up your landing to pay much attention.**
LEFT **Quad bikes feel really heavy compared to the trials bikes, but their additional power makes them fearsome hill climbers. They have their own tracks, too. This one adds lens flare to its list of obstacles**

BELOW **The sense of flow you get from a series of perfect landings is unmatched by any other game. But, equally, making a silly mistake on a hitherto perfect run is crushing**



ABOVE **There are six DLC packs planned for the first year after the game's launch, along with a number of free updates coming along the way. The existing tracks are good enough to keep you going for now, however**



Fusion's creative toolset has been improved with an easy-to-use radial menu for the most commonly picked options, through which you can access over 5,000 objects with which to build your devious Extreme track or *Flappy Bird* clone. It is, however, a little slow, at least on consoles: to move the camera, you must first guide a languid crosshair to the edge of the screen, and the process of adjusting your elevation is similarly inelegant. While the *Trials* series arguably only really came alive when it made the leap to consoles and fine analogue controls, a toolset as powerful as this is best suited to a PC mouse and keyboard.

RedLynx has fleshed out its sci-fi world with a story of sorts, delivered by two AIs with differing opinions of humans – one is in awe of you, the other calls you a "meat sack". Their remarks initially provoke a laugh and, along with the ridiculous demise of your rider at the end of every course, quickly assuage fears that the new setting would bring about the demise of the series' self-deprecating humour. But when, on your fifth checkpoint restart, you realise that nobody thought to limit these soundbites to a single play each time you visit a stage, you'll also quickly visit the menu to mute them.

You'll want to restart tracks often as you strive to achieve platinum medals across the board, beat friends' times and complete the set of three challenges on each course, the latter of which provide a welcome change of pace. Some are tests of skill, such as putting in a faultless run without releasing the accelerator, while others are more exploratory, perhaps asking you to locate and crush all of the flowers in a stage. Others still ask for a more technical run, one early example transforming the nature of a reasonably fast track by asking you not to touch any of the yellow objects that run its length. Challenges are smart additions, building on the creativity that RedLynx exhibited in designing the Achievements found in its previous games, and managing to broaden out *Trials'* remit without disrupting its core.



PANNING FOR GOLD

April sees the release of two *Trials* games, the second, *Frontier*, taking place even further into the future than *Fusion* and attempting to make the *Trials* formula work on iOS devices. It fails, struggling to replicate the series' established nuance with only touchscreen controls, and buries what's left under a cynical layer of free-to-play rubble and a weak story. But where *Frontier* makes its narrative the focus, often at the cost of the actual riding, *Fusion* at least has the good sense to keep its storyline in the background. Stunts make their way into *Frontier* as well, but only insofar as sometimes asking you to perform a certain number of backflips. Owning both games earns you exclusive items, but we recommend forgoing the freebies and focusing your efforts on *Fusion*.

Pyrotechnics are still a prominent feature of many of the tracks in *Fusion*, not least during the array of finish-line skits that see your rider come a cropper in various humiliating ways as a reward for making it past the post

Other refinements show that RedLynx has been receptive to criticisms levelled at *Evolution*. While water spouts do make a return, there's no equivalent of the controversial Sewage Plant here, which forced riders to negotiate a row of control-sapping plumes. Luck, on the whole, has been wrung from the equation more thoroughly than ever before, and when it does come into play – in an addictive skill game that requires you to ride over a series of randomly selected lengths of floating obstacles, for example – it never feels cheap.

Fusion's name is a misnomer, then. While it attempts to blend FMX, quad bikes and more familiar *Trials* action, the new elements sit uneasily with the old. *Trials* has always been about precision and skill, traits that are blunted or obfuscated by four-wheel drive and fussy inputs. And the spotty polish suggests that, even with Ubisoft's help, a simultaneous multiformat launch was too great a reach. But when *Fusion* gets things right, it does so in a way that only a *Trials* game can, dissolving the connection between player and bike so directly as to suggest no distinction at all. And when you land a difficult jump perfectly or finish a tough track with only 200, rather than 300, faults, it's clear that despite the occasional wobble, *Trials'* inimitable magic remains absolutely intact.

8

Post Script

Karri Kiviluoma, lead designer

Karri Kiviluoma joined Ubisoft in 2012 as a game and level designer on *Rabbids Big Bang*. He graduated to lead designer on *Trials Fusion*, and also helped shape *Trials Frontier*. Prior to RedLynx, Kiviluoma headed up the design of Bugbear's *Ridge Racer Unbounded*. We talk to him about the pressures of building on previous successes and the technical challenge of giving players instant restarts.



Many *Trials* fans would be more than happy with a selection of new tracks and Skill Games, but do you still feel pressure to add new elements to each version of the game?
Definitely. We've never felt that any of the previous games presented the 'complete' *Trials* experience; there's always something that can be added to and improved. That is part of the reason we now see *Trials Fusion* as more a gaming channel than just a game release. We will be continuing to update it and expand it, not just with six DLC packs in the first year, but also with free feature updates that expand the competitive, community and multiplayer aspects of the game.

Why did you decide to blend the Skill Games and career this time, rather than keep them separate?
Because of the power of the editor, there is very little that can't be done in terms of Skill Games. So we could have gone the route of just creating a bunch of crazy Skill Games that don't really have anything to do with the core *Trials* experience. But we know that our community, once they get their hands on the editor, will be putting together such creations. This time, we wanted to tie the Skill Games closer to the career experience, so that they're teaching you, reinforcing good driving habits and developing your skills.

The Skill Games are perfect for local multiplayer. Are we ever likely to see this introduced?
Yes, it's definitely something we've thought about. And there's nothing preventing players from creating their own local multiplayer Skill Games right from day one, using the built-in track editor. We'd love to see some of our users actually beat us in that department and create some lovely, intricate, wacky multiplayer games. And you can always go for a high score and pass the controller to your friend and say, "Beat that!"

> "We'd love to see some of our users beat us in that department and create some intricate, wacky multiplayer Skill Games"

While *Evolution*'s local multiplayer felt comparable to the singleplayer game, *Fusion*'s feels considerably slower on both Xbox One and PS4. Why did you make that adjustment?
The game runs at 60fps on all platforms and we've kept the local multiplayer feel very similar to that of *Trials Evolution*. It runs at the same speed as in *Evolution* as well, but the differences on the new quad or BMX might make it feel different. It feels like games don't do local multiplayer that much any more, but I've always been a huge fan of just sitting down on a couch with your buddies and battling it out.



It seems that Kinect's gesture recognition and DualShock 4's touchpad and motion sensors might be useful tools for the editor – did you look at supporting them?
The tracks we made for the game were built in our own level editor, the same editor that players get to use with Track Central. At the same time, the levels we make with our level editor have to run on all four platforms the game appears on. So we didn't want to spend time and resources on supporting features that appear on only one platform instead of being universal. The sole exception would be for the PC version, where we have invested the time and resources in providing a proper PC interface, including within the level editor itself.

How much of a technical challenge is it to hold the track in memory to ensure the quick restart option is instant? How do you do it?
Our engine streams data heavily from the hard drive. We stream textures, objects, terrain, vegetation and sounds. Streaming allows us to have very short level loading times – usually less than five seconds – and instant restarts. We have spent a considerable amount of programming time and effort to achieve this, because we feel that long loading times really kill the flow of the game. It's extremely important for a game like *Trials* to be able to quickly retry a section of a track, or an entire track if you wish. Sometimes tracks can be very long and you need to be able to restart from the beginning quickly, so it's definitely a challenge, but we're very satisfied with the results and it's working very well.

The four-wheel drive and heavier weight of the quad bikes makes them a safe choice for beginners, but they pop up halfway through your first playthrough. What was the idea behind introducing them?
Trials has and always will be about two wheels and crazy obstacles, so we wanted to make sure that since we are getting new platforms on board this time around, all the new players will be able to first experience what the core *Trials* gameplay is all about. The quad is something special we wanted to try to freshen up the gameplay for veterans and give new players variety. It's a great new vehicle to try later on when you unlock it, and to be perfectly honest, it'll take under an hour, depending on your skill level, to unlock it anyway. ■

The Elder Scrolls Online

Publisher Bethesda Softworks
Developer Zenimax Online Studios
Format PC (version tested), PS4, Xbox One
Release Out now (PC), June

Presentation matters more the longer you plan to spend in a game world, and *The Elder Scrolls Online* demands a tremendous amount of your time. It feels like an MMOG from several years ago, an artefact of a time when players expected to invest hundreds of hours to reach a level cap and an MMOG wasn't just a new game to dabble in but a new world to occupy. The game's pace is glacial, and your progression as a player painstaking, incremental. Where most recent games in this genre trip over themselves to provide a sense of impact and achievement, *TESO* hopes you'll settle for some slightly more elaborately embossed shoulder pads.

This more grounded approach to MMOG design is warranted by the *Elder Scrolls* name, which has always favoured low-fantasy realism over flair. *TESO*'s great weakness is that this aesthetic choice doesn't mesh well with the structures or technologies of the MMOG. The result is a game of drab, flat landscapes – greenish fields and brownish wastelands that players scurry over in pursuit of gormless NPCs with arrows above their heads. The *Elder Scrolls'* setting, which is traditionally most effective when picked at by a player with the freedom to pursue their own agenda, is derivative and drier than ash when dictated to you directly. MMOG combat, typically a game of numbers, is a poor fit for a gameworld that you are being asked to think of as alive.

Strong emphasis is placed on narrative. Every player participates as the hero in the game's central plot, which has you track down a band of scattered heroes to save Tamriel from the Daedric prince Molag Bal. Every other task you perform has a narrative context, too, but these feel discordant with the reality of play. Your character is sometimes given choices about the outcome of quests, but otherwise you are led by an objective marker that prescribes your every action. You are told that your character's soul has been stolen, but the game takes this notion further than the developer perhaps intends. Regardless of your choice of race or faction, you are a cipher: you frogmarch down linear questlines through a narrow series of indistinct zones, always being told that what you're doing is important, but never convincingly.

Presentation is *TESO*'s major flaw, but it does not represent the full extent of its offering, and there is skill evident in the design of many of the game's underlying systems. Character customisation, for example, benefits from the extensive freedom afforded to you. Although you must select a class from a set of familiar archetypes at the beginning of the game, you aren't required to follow a prescriptive levelling path after this point. You can specialise in every set of armour and weapon type in the game and, in *Elder Scrolls* tradition, the continued use of particular gear or types of skill lets you unlock new abilities that can be freely mixed and matched. The trinity of MMOG roles – healer, damage dealer, tank – still applies, but you arrive at them in your own way.

You are told your character's soul has been stolen, but TESO takes this notion further than the developer perhaps intends



Zenimax Online Studios has correctly judged that the most engaging thing about character development is the journey itself, and built a system that encourages creative problem solving. It may not be obvious why an ability that surrounds your character in protective rock armour is superior to an ability that offers a chance to deflect an incoming spell, but unpicking decisions like this one is satisfying.

Player-versus-player combat fares well, too. *TESO*'s three factions battle over fortresses in Cyrodiil, a central province that doubles as the game's largest zone. Here, a series of regular quests with scaling rewards help provide ways into competitive play for solo players, small groups and large guilds. While a lone wolf might be tasked with scouting a distant lumber mill, a whole faction might take on the job of stealing an Elder Scroll from a well-protected enemy fortress. Siege weapons are readily available and provide a sense of scale and spectacle that the game is otherwise lacking, and the engine capably flings around dozens of onscreen players without lag. In this environment, you forgive the short draw distance and dull landscape because your focus is on the people around you, which is precisely where it should be in an MMOG.

The game's biggest failing is that it does not allow the presence of other players to enhance the rest of the experience. You'll still have a better time if you play with friends, but that's true of almost any cooperative game, and the presence of other humans is otherwise a hindrance. Minerals and herbs will be snatched up while you clear nearby monsters. Quest objectives will be hoovered up before you can get to them. Chests to be lockpicked – one of *TESO*'s clearest gestures towards its singleplayer cousins – devolve into a beacon for players to get in the way of each other.

All of this is more realistic than giving each player their own instance of the world to loot, admittedly, but it is also frustrating, and in its own way it traps the player in a different kind of solipsism. Everybody is out to build up their own character, and their interactions with each other are a matter of self-interest first and foremost. After clearing a 'Dark Anchor' – the closest thing the game has to a public quest – the vast majority of players will go their separate ways in silence. This isn't an isolated problem as MMOGs go, but nor is it a compelling argument that a multiplayer environment is the best way to present this world or these characters. Players who seek the traditional fantasy MMOG experience may find something of value in *TESO*, because it has evidently been built with them in mind. But it is difficult to imagine many others investing hundreds of hours in a place this bland, in a formula this familiar, and in a game this demanding of both your time and your money.

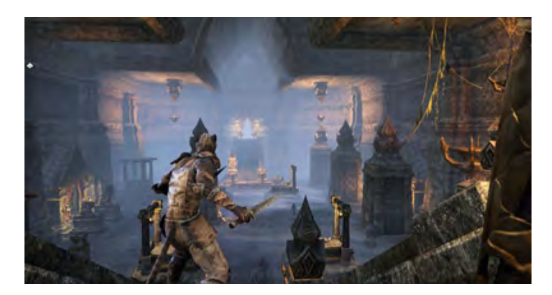
5



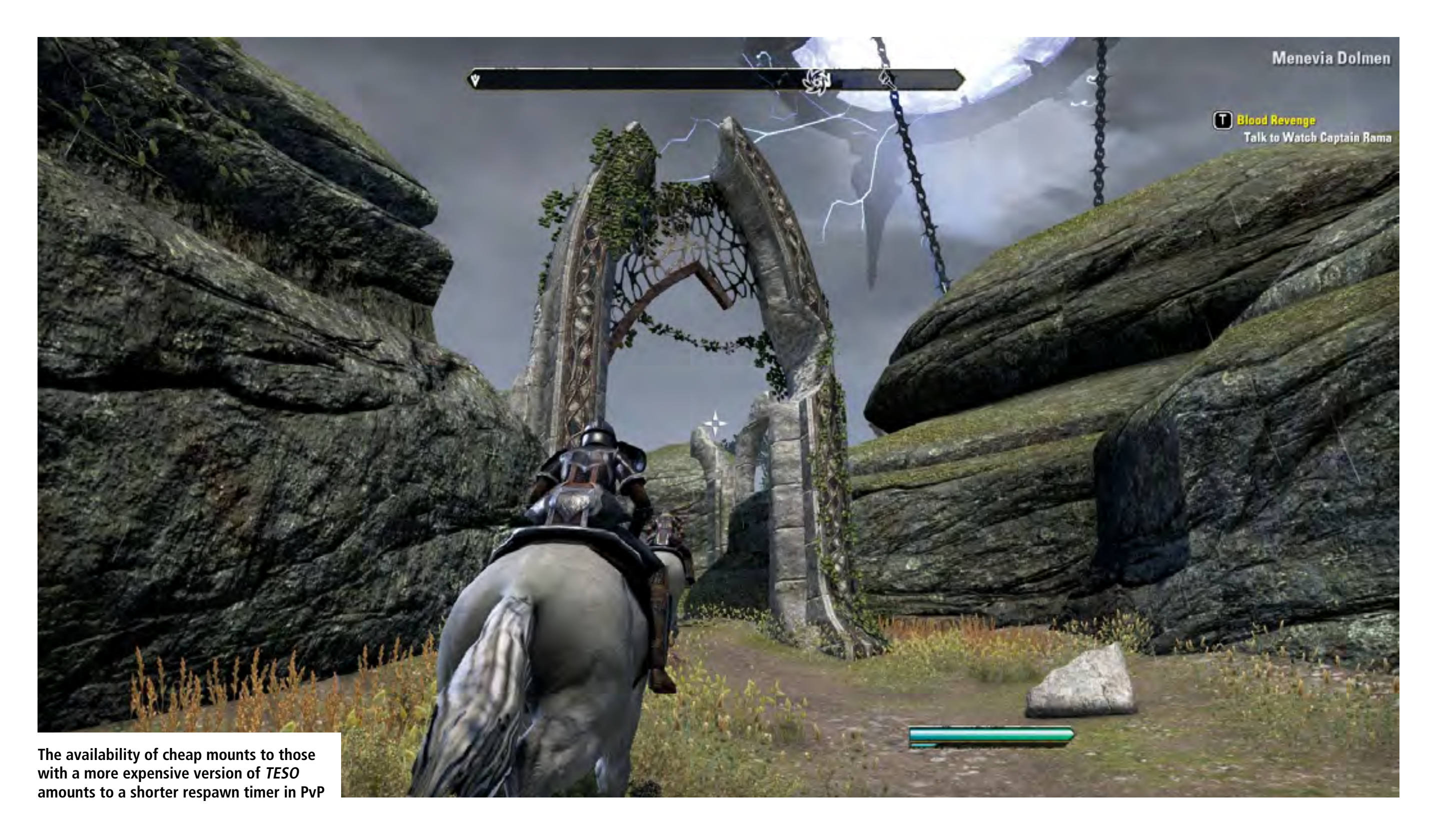
LEFT Combat requires manual aiming, but still shares much of its DNA with other MMOGs. Maintaining a rotation of buffs, debuffs and special attacks is the key to success, and this varies little. BELOW Traditional *Elder Scrolls* locations, such as this Dwemer ruin, are presented out of proportion to account for the MMOG-style camera and lack of other players. BOTTOM A preoccupation with time travel, ghosts and dreamworlds means you spend more time than you might expect running around alternate dimensions. In the vast majority of cases, these are purple



RIGHT Environments and characters are highly detailed for a game of this type, but a short draw distance and the stiff animation makes the game look rough in motion







The availability of cheap mounts to those with a more expensive version of *TESO* amounts to a shorter respawn timer in PvP

Post Script

Can a big-budget subscription MMOG survive in 2014?

The key to understanding the challenge facing a new subscription MMOG is the difference in size between a game's effective audience and the crowd it will attract at launch. There are longtime MMOG players who accept a subscription fee as part of their hobby, and who are forgiving, even expectant, of lengthy levelling curves. This audience is sensitive enough to the vagaries of the genre that even small innovations can feel like substantial new features that justify the asking price. These are the players who will get the most out of *The Elder Scrolls Online* at launch, and who will form the foundation of the game's subscriber base for as long as it upholds the monthly payment model.

It's unfair to second-guess these fans' enthusiasm for the genre, but the problem is that players like this do not exist in sufficient numbers to yield the kind of money the producers of licence-driven MMOGs are looking for. More so than any other type of game, the quality of an MMOG is directly affected by its financial success.

The aggressive marketing for *The Elder Scrolls Online* is aimed at hardened MMOG players, series fans, and – in the case of the console versions – players who may not have played an MMOG before. Many are players who do not have the requisite experience to understand why *TESO* is limited in the ways it is, why it looks worse than its predecessor, and why it demands so much time and money. They're the players who will be the least forgiving of the fact that those expensive-looking CGI trailers have very little to do with the playable game, and yet they're being leaned on to ensure that *TESO* is successful in the longterm.

It's a remarkably similar situation to the one faced by BioWare's *Star Wars: The Old Republic* in 2011. When that game started to bleed subscribers in the first few months, it was the MMOG hardcore who were left behind – those who were attracted by the idea of a new Star Wars game were the first in and the first out. It seems logical to expect the same of *TESO*, a game whose rumoured budget far exceeds that of the famously expensive *Star Wars: The Old Republic*.

The first announced update for *TESO* paints a worrying picture. A new zone called Craglorn promises new dungeons, larger raids – here called Trials – as well as daily quests and new armour sets to collect. All of this should be familiar to MMOG veterans: it's holding-pattern content, the maintenance of a status quo tuned to prolong subscriptions.

When the honeymoon period ends for that initial rush of early adopters, it's the MMOG faithful who will suffer. If the game transitions to a free model, then these are the players who will be paying a premium for it in the interim. If update plans are dialled back to account for a shrinking audience, it's them who will see a diminishing return on their investment. If the game isn't built to scale with the size of the audience that it's likely to get, then it's difficult to paint an optimistic picture of its future, just as it's unfair to expect the most dedicated fans of a genre to shoulder the consequences of a business plan that hasn't yielded success of any great magnitude for almost a decade.

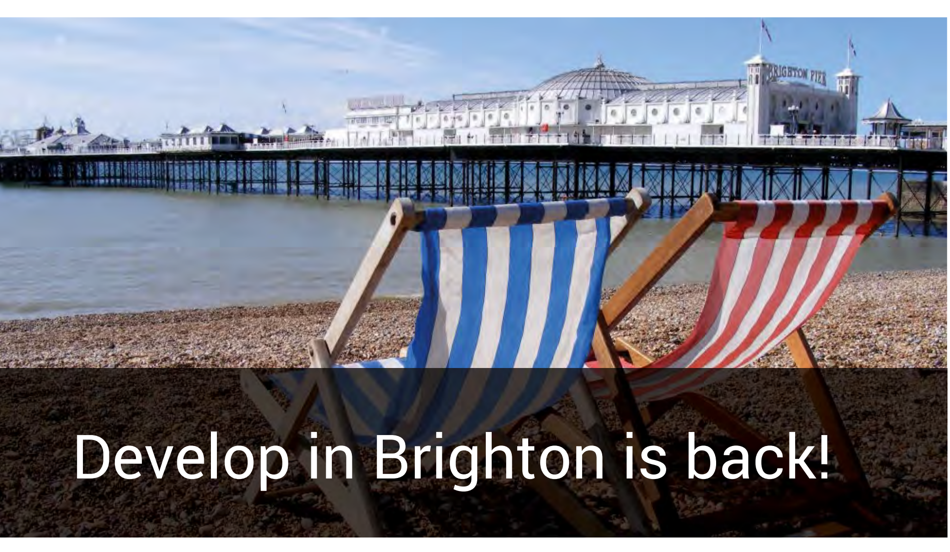
The monthly subscription is dead. It was arguably anachronistic ten years ago, when *World Of Warcraft* proved that MMOG content could be produced in a way that didn't require constant maintenance by a team of developers. The next big success in this genre will not have a subscription fee, and the games most likely to achieve that success are the ones that are liberating their designers from the task of constantly serving content to an audience that is as likely as not to move on to the next game within a few months. MMOGs of *TESO*'s ilk will continue to exist for the players that want them, but the future is player-generated content, not player-subsidised content farms. ■



Super Early Bird

Book by 7 May & save up to £200!









Come and join more than 1600 developers for Europe's leading game dev conference.

Insight

The Develop Conference brings together the whole game dev community - from global dev superstars to micro indies – to share experiences, information and **ideas.**

Inspiration

Come and be inspired by what other developers are up to - the innovations and successes. Then take that inspiration back to the studio with you!

Networking

It's not all about learning! Come and mix with your fellow developers after hours, make some new contacts and hang out by the seaside...

Speakers confirmed so far include:

Nathan Vella, Capy • Gavin Strange, Aardman Studios • Rex Crowle, Media Molecule • Roberta Lucca, Bossa • Stuart Saw, Twitch • Richard Evans, Versu • David Braben, Frontier • Peter Molyneux, 22Cans • Ella Romanos, Remode • AJ Grand-Scrutton, Dlala • Jason Avent, Boss Alien • Siobhan Reddy, Media Molecule • Nick Baynes, Big Bit • Jo Twist, Ukie • Mike Bithell, Independent and many more...



Sponsored by



Do you love making games in a hurry?

Great – then the Develop Game Jam is for you! For years Develop attendees have been leaving Brighton brimming with ideas for making better games back home. Let's make some here!



Free sessions for Indie start-ups and wannabes.

Join us to hear straight talking from successful indie developers about how they started, what worked for them, and what mistakes they made – so you can avoid repeating them.

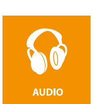


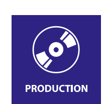
Game submissions are now open!

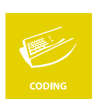
If you'd like your Indie game to be showcased at the Develop Expo then enter our Indie Showcase competition today – deadline for submissions is 12 May and it's free to enter.

















www.developconference.com

International Media Partner

develop

Media Partner



Media Partner

gamesindustry.biz

Media Partner



Media Partner



Media Partner



Partner



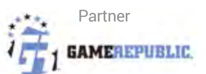
Partner



Partner



Partner



Organised by



Kinect Sports Rivals

Publisher Microsoft
Developer Rare
Format Xbox One
Release Out now

There's a bobble-headed spectre looming over *Kinect Sports Rivals*. Rare's latest cannot escape comparison with *Wii Sports*, and within minutes of starting up the game, the studio's latest stab at justifying Xbox's much-maligned camera serves only to show why Nintendo invented the Mii. As the David Tennant-voiced narrator walks us through a painstaking – and painful, given the position we're forced to take up to align our face within the boundaries on our TV – Champion creation process, we realise the last thing we want to see in a videogame is an uncanny representation of our face. We remember EA Sports' Game Face, after all. So as we stare at the undulating mess of voxels onscreen, we experience only a form of abject terror.

Thankfully, after the achingly slow tease concludes with the camera finally alighting on our in-game face, we're relieved to find that we've been nipped, tucked and generally tidied up. The cartoon avatar in front of us may not exude the sort of charm with which Rare's art team made its name, but all the facial features are in the right place, it's got the hair right, and we are a picture of health and fitness. We'll take that.

It wasn't character creation that put *Wii Sports* in 80 million households the world over, however, but rather the simplicity of its design and the immediacy of its input device: you could pass the Wii Remote to someone who had never played a videogame before and tell them to just play tennis. The first time we play Target Shooting, one of *Rivals'* six sports, we think we have our *Wii Sports* moment. We make a gun shape with our fingers, line up our crosshairs over a target, and squeeze an invisible trigger. The target shatters. Kinect suddenly feels worth every penny it adds to Xbox One's retail price. Sadly, the illusion also shatters when we realise, after unintentionally shooting a few of the skull-bearing targets that dock points, that our itchy trigger finger wasn't doing anything. All you have to do is line up your shots and the game fires automatically the second a target falls within the crosshairs.

That's our own fault for not taking in the rules, of course, but in a social setting it's hard to maintain focus through excessive loading times, introductory cutscenes and, when you first play a sport, an overlong tutorial video introduced by the pun-loving but thoroughly charmless Coach. *Kinect Sports Rivals* only works as a party game if the party is in another room. You are chided for standing too close to the screen, or too far away. The Champion creator grumbles about there not being enough light. The action is prone to pausing when something unexpected comes into Kinect's view. *Kinect Sports Rivals* is best played alone in a large empty room, which is just about as much fun as it sounds.

The new Kinect has a wider field of view than its predecessor, but rather than simply use that to better accommodate play in small spaces, *Rivals* also asks you to cover more ground. In Soccer, saving a shot heading for the bottom corner means scurrying a few feet to the side and likely knocking into the coffee table you thought you'd moved safely out of the way. Onscreen messages will often complain that Kinect can't see your feet, suggesting you move farther away or tilt the camera downwards. Minutes later, as you reach up for a handhold in Rock Climbing, you're told Kinect can't see your hands. And the game moans if you're not entirely in view during sports that only require one set of limbs, such as Wake Racing and Target Shooting.

At times, the required input is so disconnected from its real-life equivalent that it feels every bit as abstract as a button press



Even when Kinect can see all it wants, it still lets you down. While latency has been much improved in the Xbox One version, there remains enough of a delay between action and consequence for players to notice and feel cheated by, and for Rare to try to compensate for. At times, an AI tennis opponent will return a serve with such timidity that the ball moves impossibly slowly, as if on wires. It's meant to make things easier, but it does the opposite: the faster the ball moves, the smaller the gap between when your brain thinks you should be swinging and when the game needs you to.

At least Tennis is a reasonable approximation of the real thing, with serve and swing motions eventually producing the correct results onscreen. In Soccer, curling a shot into the corner means putting your foot through the invisible ball and wildly following through to either side. You can boot the ball straight into the corners, but Kinect's view of the goalposts is very different from yours, its new, wider field of vision meaning you have to aim your shot well wide of the onscreen post. At times like these, the required input is so disconnected from its real-life equivalent that it feels every bit as abstract as a button press, only with more latency and a dent to your self-esteem when a curled shot goes straight at the keeper or a carefully left-spun bowling ball veers rightward into the gutter.

Rivals' biggest problem is that its chances of success are inexorably bound to the performance of the device around which it is designed. There's plenty here to like, including a well-structured career mode with levelling, unlockable kit and power-ups to encourage offline replayability; a companion app with challenges and social features to sustain your interest online; and a stylised art design that makes it stand out from its host platform's photorealistic crowd. Yet all the good work Rare has done on the trimmings counts for little when you must play with a device that is still too finicky and untrustworthy, that still requires too much space, and that asks you to make almost-real motions at almost the right time, then expects you to be satisfied. Chances are you won't be, even if you have enough space to push back the sofa, move aside the coffee table and work around the white elephant in the room.

5



ABOVE The game's greatest use of Kinect is in the brief window provided for celebration after each successful goal, bowl or point. Don't get too carried away, though: the game will pause if Kinect loses sight of you







TOP That a hit marker should appear so long after a racquet swing has completed speaks volumes about how much of a problem latency is for Kinect. Tennis is still breezy fun, though, and quite frantic in multiplayer. ABOVE *Rivals* certainly looks the part at times, running comfortably at 1080p thanks in no small part to its undemanding art style. A stable 30fps means little when input latency is unavoidable, however. LEFT Rock Climbing is perhaps the most intricate of the six sports on offer, with a depleting stamina bar and fellow climbers to consider. It's imbalanced by the ability to yank opponents off the wall, even if it's so much fun to do so

Child Of Light

Child Of Light may have been pitched as an indie experiment – a project made with an almost rebellious small-team attitude within the walls of a big publisher – but this is a Ubisoft game through and through. And we don't just mean the obligatory main menu nag to log into Uplay, Ubisoft's social-network-cum-game-store, which the publisher's persistence in pushing is now almost perversely endearing. There's a crafting system, with collectible gems combined to make more powerful ones to slot into weapons for little stat or elemental buffs. There's a levelling curve that doles out skill points to be spent in a colossal tech tree. And there are Confessions – scraps of paper that flutter on the breeze and, when collected, fill out the story.

Thankfully, *Child Of Light* has plenty to distinguish it from its stablemates, much of which comes from creative director Patrick Plourde's desire to make a game parents and children can play together. The setting is not a hostile tropical paradise, but the fairytale land of Lemuria, a world where an evil witch has transformed a town of dwarves into crows, and where mice in period attire live on the back of a giant and fret about the state of the local economy. It's a hand-painted, and often beautiful, 2D world into which protagonist Aurora awakes after seemingly dropping dead in her native Austria. And so she sets out to find a way back to the real world – her progress sped up by the power of flight, granted by a magical crown passed down by her father – helping out the stricken Lemurians as she goes.

Child Of Light has been mechanically tailored to family play. Battles are turn-based and largely stress-free. They're basic, too: while your party will be six strong by the end of the game, only two members of it can participate at once. Whether you're flitting around Lemurian skies or locked in combat, however, either the main player (with the right stick) or an accomplice (on another controller) can also take control of Igniculus, a talking firefly. Out in the world, he can access treasures and activate switches Aurora can't reach, and he takes a role in simple environmental puzzling whose solutions invariably involve casting the right shadow on the right object. In combat, however, he's even more important.

At the bottom of the screen sits a timeline along which scrolls an icon for each friendly and enemy combatant. The final portion of the bar is coloured red. When an icon reaches the start of this final section, you make your move, but it doesn't necessarily play out instantly. If you're hit beforehand, you're dumped back along the line, forced to skip your turn. By positioning Igniculus over an enemy and squeezing L2, however, you can slow them down; hover him over an ally, meanwhile, and he'll regenerate their health a little. All of this is governed by an energy bar refilled by absorbing little orbs, called Whispers, from glowing plants found out in the world and on the battlefield.

Publisher Ubisoft
Developer In-house (Montreal)
Format 360, PC, PS3, PS4, Wii U, Xbox One
Release Out now

Aurora is a strong-willed, kind-hearted soul who not only saves the day, but just about rescues Child Of Light

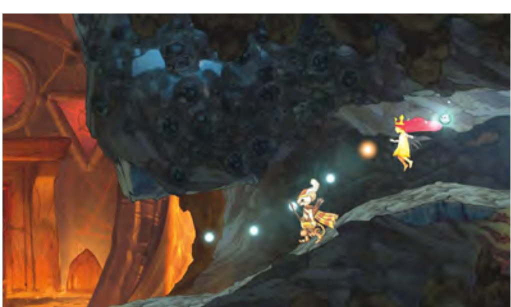


It adds a dynamic realtime element to click-and-wait turn-based combat, but it does make for an even smoother ride in a game that is far from a challenge. Combat is almost impossible to fail. By the time the game gets hard enough for one of your number to fall in battle, you'll have a healthy stock of potions to revive them with, and you can instantly swap out a struggling party member for one with full health. Enemies get stronger, of course, but so do you – for the first half of the game, you'll see the level-up screen after just about every fight, and your party accrues XP irrespective of whether or not they set foot on the battlefield. There's a period around two-thirds of the way through the game where you briefly feel threatened; your party's differing skillsets suddenly appear useful, perhaps even vital. Then your ranks are swollen by a warrior with a taunt to draw enemy attention, high health to ensure he's rarely in danger, and better damage output than anyone else in your party. There's no reason not to use him, no incentive or need to mix up your approach, and the rest of the game is a walkover as what should be a tactical and dynamic combat system instead becomes one-note.

The story, meanwhile, is a procession of fairytale clichés with a twee, forcibly rhyming script. Its low point is a twist that will struggle to catch even younger family members off guard, and which anyone who played *Far Cry 3*, a game with which *Child Of Light* shares both a creative director and a writer, will have seen coming a mile off. Thankfully, Aurora is a delight, a strong-willed, kind-hearted soul who not only saves the day in Lemuria and Austria, but just about rescues *Child Of Light* as a whole. She's delightfully animated, her long red hair swishing as she turns, her wings fluttering delicately as she zips up the side of a mountain. While she, like everyone else, is unvoiced throughout, she gives the game its greatest sound effect: the soft clap of the soles of her feet when she lands on a stone floor. Had the same attention to detail been lavished on *Child Of Light*'s pacing and structure, Ubisoft Montreal might have had a hit on its hands.

Instead, *Child Of Light* is an already slow game that's needlessly bogged down by those signature Ubisoft systems. The levelling is the worst culprit: by the time the credits have rolled, there will be over 70 skill icons on six separate trees, and most offer up the same minor bonuses you get automatically when you level up. It may be designed for families, but *Child Of Light* is too cluttered and too slow to hold the attention of lone players, let alone multiple generations sharing a sofa. Bickering over whether to spend a skill point on a couple more magic points or a minor damage buff isn't much of a family pursuit, after all. It's a game that, for all the intricacy of its systems and the charm of its painterly world, feels oddly empty.

5





LEFT NPCs aren't just couplet-spouting window dressing. Those with exclamation marks over their heads dish out sidequests. Most are to-and-fro fetch quests, sadly, but you level up so quickly from combat that they're easily ignored

TOP While Igniculus's Slow ability has its uses, it can be more trouble than it's worth. Some monsters react to an interruption with a counterattack, and may return the favour and cast Slow on you.
ABOVE The game shares more than an engine with *Rayman Legends*. Collect trails of Whispers in the correct order and you'll get a bonus at the end, topping up your health and magic bars



Business-minded rodent Robert is useful when you first meet, being the only character with a melee attack that hits all foes, but he's soon surpassed

Hearthstone: Heroes Of Warcraft

Few studios could take a niche genre that inspires anything from apathy to revilement outside of its fanbase, pair it with a business model that a cadre of players finds actively offensive, and meld them into an insanely popular game. F2P card battler *Hearthstone* sees Blizzard do precisely that. In this underfed space, it is a revelation, a systemically rich and charmingly presented wonder that can transmute a spare 15 minutes into an addiction that devours whole evenings.

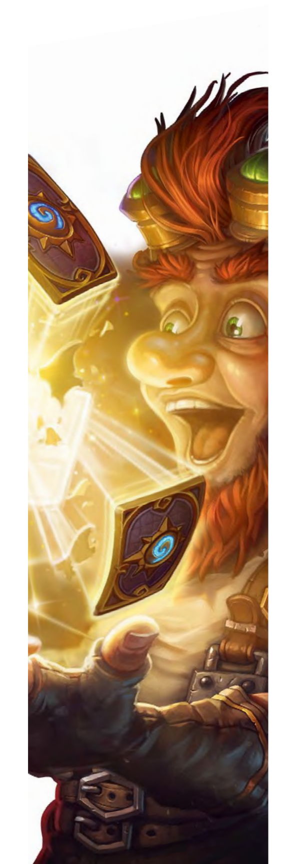
Every match is an escalating duel between two heroes, each in possession of a 30-card deck and 30HP. There is only one objective: reduce your opponent to zero life before they can do likewise to you. It's a familiar goal from the likes of Magic: The Gathering, but Blizzard's keen refinements set *Hearthstone* apart. Gone are the befuddling stacks of counters and tokens, swept away into the digital ether. Gone, too, is the need for a rulebook, with clear symbols and effects explaining every buff and debuff, and a gentle ramp to induct newcomers into the game's intricacies. In their place is a readability suffused with animated charm. Your minions thud onto the board with a hefty tactility, and may come wreathed in smoke, iron shields or whirlwinds to denote their powers. Spells trace bright paths to their targets. It's rarely subtle, but nor are you ever confused as to what card has which effect. On iPad, the flourishes are even better, invoking a wonderful link between your finger and the world beyond the screen.

The polish is more than presentational, with every system elegantly honed. The myriad minion powers – drawing cards; buffs when attacked; Taunt, which draws physical strikes onto the power's bearer – mesh together in careful battles of move and countermove. Build a deck, meanwhile, and you can ask for the computer's suggestions to fill its weakspots. The hero powers are subtly transformative, too, providing options even when luck fails you. Asymmetric matchups will always call balance into question, but our experience of playing since open beta is that the only advantage that matters lies in finding a hero that suits your playstyle. On the card side, an evolving metagame should provide checks to any dominant strategies that emerge, and you'll learn new tactics from every lost match.

Mana crystals, the currency by which you play cards, represent our favourite of the rebalancing acts. Instead of tying buying power to yet more cards, *Hearthstone* ups the ante by adding a crystal to your supply each turn, to a limit of ten. This prevents 'mana screw', in Magic parlance, where you fall behind simply because you're denied resources by luck. Meanwhile, the second player will be granted a card called The Coin, played for free to provide a one-use boost to their crystal stash – an unpredictable way to mitigate first player advantage. Cards with the Overload keyword are overpowered for their initial cost, but deny you mana crystals next turn.

Publisher Activision-Blizzard
Developer In-house (Blizzard)
Format iOS, PC (both tested)
Release Out now

A systemically rich, charmingly presented wonder that can transmute a spare 15 minutes into an addiction



We could go on. This is what *Hearthstone* does best: presenting a clear system and then allowing many tactical possibilities to spring up from it. It's up to your skill, and your deck, to make the most of them.

Here's where we get to the messy part: money. *Hearthstone* is generous with all that you need, so it's viable to play for free, but you'll *want* a deck brimming with cards that work synergistically to crack through the echelons of ranked play. The early hours are flush with bonuses: working through the comprehensive Practice mode will unlock the game's nine heroes and their initial set of Basic cards, with many more cards gained through levelling. You're also given a wealth of neutral cards to toy with, more than enough to build your first decks and find your preferred strategies.

It's the switch from AI to human sparring partners that makes buying blind Expert packs attractive. Again, the balancing is great – no one card we've encountered is so powerful as to be insurmountable – so you're not strong-armed into spending. Chains of complementary powers can be difficult to overcome and are tempting to emulate, however. You can buy more cards with real money or in-game currency, but since Expert packs cost 100 gold, and doing your daily quest earns you 40, it's a fair old grind to a new set of five cards after the freebies dry up. Card crafting at least ensures every penny you do send Blizzard's way is worthwhile, recycling your unwanted extras, and packs are far from extortionate.

The divisive Arena mode rounds out the package. It's a pay-to-enter challenge (150 gold, or £1.49) where the skilful and the lucky can reap prizes far in excess of the investment. It asks you to construct a deck from the game's broader card pool by repeatedly choosing one card from a selection of three. After that, you attempt to notch up as many wins as possible before you lose three games. While some may find its paywall blasphemous, it's more than a gamble for big prizes, offering a fresh challenge from ascending the ranks. If you don't like the pricing, it's isolated from the rest of *Hearthstone*, so it ruins nothing. Play it or not: the choice is yours.

What isn't optional is an Internet connection, which you'll need even against the AI. When you do play other humans, the matchmaking's good enough to keep you from getting trampled regularly, but it's not perfect. Low-level players may be stung in the wake of league resets, and sometimes you're pitted against a player many levels your senior, or with an obviously superior deck.

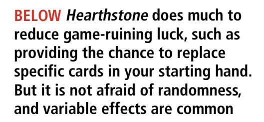
Such small detractions cannot overshadow Blizzard's achievement here. It has, through painstaking effort, upgraded the card duel into a thoroughly modern form. It has resisted the dark lures of free-to-play, and has made deep systems simple to parse without neutering them. In short, *Hearthstone* is borderline alchemy, turning physical systems into digital gold.

9





ABOVE *Hearthstone*'s boards are among its most delightful touches. Every corner feature is lightly interactive, the Pandaren gong in the bottom left releasing a sonorous chime with a prod, say. These will help you while away the short waits between turns.
LEFT The Arena requires a very different kind of deckbuilding skill to the constructed modes, but Blizzard's tools, especially the graph of your deck's relative cost makeup, make it simple to grasp



BELOW *Hearthstone* does much to reduce game-ruining luck, such as providing the chance to replace specific cards in your starting hand. But it is not afraid of randomness, and variable effects are common



ABOVE Each hero has their own set of Basic cards, which tend to tie into their theme. The Paladin has cards that shield allies and restore health, for instance, while the totem-summoning Shaman has several minion boosters



Kirby: Triple Deluxe

HAL hasn't made a 3DS game since AR freebie *Face Raiders*, but *Kirby: Triple Deluxe* shows it's lost none of its infatuation with the handheld's featureset. It's the first platformer since *Super Mario 3D Land* to make you want to nudge that 3D slider up and leave it there, with intricate layered worlds that long to be given every bit of depth the device can muster. Spring-loaded hands erupt from the screen, Kirby hops on stars to warp from foreground to background, and enemies untether themselves from mundane 2D paths.

It could be tacky, and is at times, but *Triple Deluxe*'s Story mode is suffused with a rare vibrancy. Its six worlds whip you from meadows to dusty plains, then into subversive mirror-backed funfairs, all on the path to a castle with huge gemstones for platforms. Even fire and ice are pepped up by HAL's exuberance. Kirby has new copy abilities, too, and continues to make simple inputs work hard. He's joyous to control here: flowing, punchy and characterful. *Triple Deluxe* is still sedate, but its gamefeel is just so and Kirby's a powerhouse.

He might even be too strong. The game starts out trivially easy, at least for adults, and only gets remotely threatening in late-game boss battles. HAL would rather stretch its grown-up fans with the light puzzles and timed challenges that protect its collectibles, it seems. The former are great, being easy to decipher but often demanding in execution, testing but never frustrating.

Since bosses are your only real opportunity to show off your powers, though, it's disappointing to see them reused in late-game boss rushes. The final world feels rushed too – a best-of tour that stretches smile-raising novelties thin. The inventive multistage final encounter more than makes up for it, even if it seems pitched above the young audience the rest of the game courts.

The story, however, is only one mode of five. Two are unlocked after the credits, and add longevity to an already lengthy adventure. The others – *Smash Bros*-lite arena brawler Kirby Fighters, and rhythm-platformer Dedede's Drum Dash – are less assured. With a handful of cramped stages, chaotic items and imbalanced movesets, Fighters doesn't feel worth gathering a group for. Drum Dash blends beat matching with crunchy tests of timing and platforming skill, but while it's diverting, it's over too quickly given the learning curve.

Perhaps it's telling that the icons for Fighters and Drum Dash on the menu are that bit smaller than Story, suggesting HAL knows full well what its main attraction is. If the energy spent on them had been used to hone the tale's final hours, this might have been the best *Kirby* yet. As it is, his 3DS debut is too uneven to be essential, but too charming for fans to miss.



Publisher Nintendo
Developer HAL Laboratory
Format 3DS
Release Out now (JP, US), May 16



CHAIN GANG
Sunstones are *Triple Deluxe*'s main collectible, gating progress and unlocking bonus levels. Getting them might require a sharp eye, reflexes, Kirby's Hypernova ability to guzzle or move huge objects, or genteel gyroscope-enabled puzzling. However, we adore the entirely aesthetic keychains, which once found are added to a collector's wall. And in a delightful use of StreetPass, the item-dispensing Bandana-Dee may also throw in a keychain from local friends.



Hypernova Kirby is used to gulp down enemies many times your size, in puzzles and even boss fights. The power's limited to prescribed areas, but slapstick animations and visual flourishes stop these sections getting stale

Mercenary Kings

Mercenary Kings is a Paul Robertson game all right. While its gameplay most readily invites comparison to *Metal Slug*, its closest visual cousin is Robertson's *Scott Pilgrim Vs The World: The Game*. *Mercenary Kings*' chunky pixels showcase his love of manga's grotesque side: dead enemies' heads swell and explode, foes noiselessly roar before evaporating in showers of claret. On paper, a 2D platform-shooter that riffs on '80s action cinema may not allow the Australian animator to indulge his influences, but that doesn't stop him having a bloody good go.

Tribute Games was set up by members of the team behind *Scott Pilgrim*, so it's little surprise to see many of its older game's traits reappear in *Mercenary Kings*. Both share an unusual jump, with a little delay before takeoff while a character bends their knees. Both give a poor first impression by starting too slowly. And both update old-fashioned templates with newer systems.

Some of *Mercenary Kings'* inclusions work better than others. *Borderlands*-style weapon customisation is a fine fit, and the perk-like Mods are smartly balanced, with many buffs also presenting a trade-off. And while you can only carry two types of item into battle, you can call in alternatives with mid-mission airdrops. *Gears Of War*'s active reload is a pointless addition to this genre, though – the event bar that hovers overhead distracts your focus, slows this game's pace as opposed to punctuating it, and even obscures the action. Elsewhere, a bladesmith sells increasingly wacky melee weapons, a chef cooks up single-mission health boosts, and you can buy banners and ornaments to decorate your tent.

It's all understandable to a point – there's only so much you can do with two-directional running and four-way gunning – but fatigue still soon sets in, despite the hundred-plus missions on offer. Early ones are exercises in endurance rather than skill, as you scour multitiered levels for materials or hostages, hindered by a confusing map. Things improve later on, but there are far more missions than stages, and you're retreading old ground by the halfway mark. At least familiarity means you're less likely to fall for dirty trial-and-error tricks.

If only Tribute had focused more on what *Mercenary Kings* does well. Robertson's work is as eye-catching as ever, the crunchy chiptune soundtrack is marvellous, and the action is engrossing enough to make you briefly forget the bloat that surrounds it. But as a whole, *Mercenary Kings* is a case study in the perils of Early Access. The need to provide a steady flow of content to early buyers has birthed a glut of superfluous systems and a swollen set of missions – the wrong sort of substance to accompany Robertson's style.

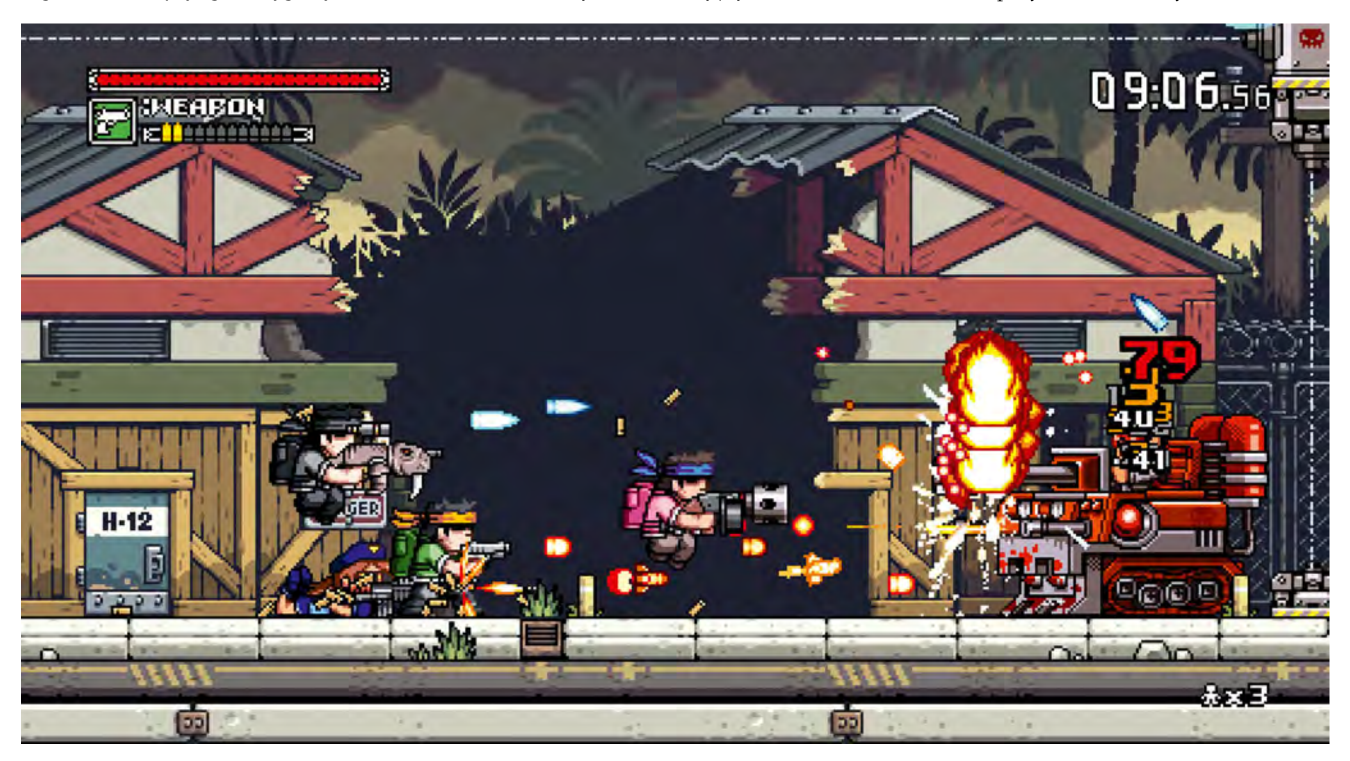
5

Publisher/developer Tribute Games
Format PC (version tested), PS4
Release Out now



BREAK CAMP
The tutorial culminates in your arrival at your base, Camp Crown. It's sparse at first, but after an hour or two of rescue ops, it will be teeming with merchants. It's here you can join with up to three co-op partners, but don't expect to get going before everyone does the rounds of the shops. The host picks the objective, too, but poor matchmaking means that you'll often be lumped with beginners, and forced to repeat early missions for tiny payouts.

Gathering missions are less of a chore when an organised team of four can split up and share the load. Perhaps the most curious aspect of *Mercenary Kings* is that this fourplayer game only gives you two character choices



Fract OSC

F*ract OSC* is inscrutable. You're dropped into a gorgeous polygonal neon world without a single line of text to get you started, no flashing objective marker to show the way, no patient explanation of its systems to help you along. The only things Phosfiend Systems explicitly reveals is that one mouse button locks your view and the other lets you interact with certain objects. After that, you're on your own.

With nothing to do but wander, you set out and start to learn, unpicking this world piece by piece. You happen upon small round structures whose walls move politely aside as you approach; when inside, switching to Interact mode reveals a star map of sorts. Later, you'll be able to travel between the ones you've visited by riding an invisible monorail. For now, you head off to a large, conspicuously lit nearby structure, the soft hum of a synth growing louder as you approach.

There you'll find a spatial puzzle with an objective that quickly becomes apparent – rotating platforms to connect a beam of light between two doors, turning dials to complete circuits, sliding blocks into holes – but with a design of such complexity that it might take an hour to solve. The block puzzles are especially intricate: each moves along a single axis, and you can't move one at all unless you're standing on a colour-coded platform, getting to which is a puzzle in itself.

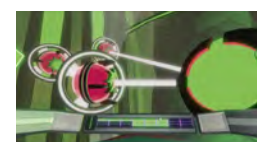
Getting stuck can frustrate in a game that gives you so little in the way of instruction, but the music keeps you going, building up as you progress, a new element arriving in the mix for each successful step you take through a puzzle. It's no mere soundtrack, either. Those circuitry puzzles, for instance, aren't just about lining up components in the right order: power must pass through meters whose needles are manipulated into position by tweaking volume or effects levels.

When you succeed and the final piece of the puzzle slots into place, your reward isn't a text backslap, achievement popup or skill point, but a drop. Beats and bass crash in as the record you've been piecing together reaches a crescendo. It's like having Boards Of Canada noodling away behind you as you work on the world's hardest jigsaw puzzle and both of you having two very different eureka moments at the same time.

Where playing *Proteus* meant finding beauty in its procedurally generated musical chaos, *Fract OSC*'s use of music is rigidly authored, and is all the more powerful for it. It can be too obtuse at times, but the rewards are quite unlike anything else in games: the music peaks, a laser beam rockets off into the sky, and you turn, heading off after that distant synth, in search of your next project deeper in the neon unknown.

8

Publisher/developer Phosfiend Systems
Format PC
Release Out now



BASS OF OPERATIONS
Complete one of the main puzzles and the camera angle shifts abruptly. Surprised by this atypical handholding, you take the hint. Platforms form under your feet, guiding you to a brief puzzle in which you arrange notes on a sequencer. They're a great change of pace, taxing a different part of the brain, but rewarding it in the same way, with the music reaching another crescendo. You also unlock new synths and effects for the sequencer at your home studio.

Sliding block puzzles have never looked so good. The ultimate goal is to fill the green outlines with cubes, but doing so requires reaching specific high platforms. Putting blocks in purple boxes activates bridges and staircases




SUBSCRIBE
GO TO UFC.COM/MAGAZINE
TO SUBSCRIBE NOW!
AVAILABLE IN PRINT
AND DIGITAL FORMATS





Red Dead Redemption



Why the sun-bleached Western was fertile ground for Rockstar

By Chris Thursten











Publisher/developer Rockstar **Format** 360, PS3 **Release** 2010



The myth of the old west is a perfect fit for Rockstar. Here's a genre of cinema with game-like themes, a setting that lends itself easily to the open-world treatment, and one that naturally supports the subjects that have become dominant in Dan Houser's writing as it's matured. The old west offers a particular vision of masculinity in a time of crisis, and deals in the collision between the individual and society. It is also an opportunity to diagnose the state of life in modern America by exploring the fable of the nation's creation.

These ideas are present in *Grand Theft Auto*, of course, but Rockstar's most successful series is handcuffed to irony. Back in 2010, making a Western presented the studio with an opportunity to escape this tonal double bind by venturing into the historical and cultural past. The result: Rockstar's warmest and most earnest game.

Red Dead Redemption is set in 1911 in a compacted slice of the south that stretches from the edge of the Great Plains down through Texas – fictionalised here as New Austin – and across the border into northern Mexico. Modernisation is coming from the east: the first image in the game is of an early automobile being offloaded from a paddle steamer. Protagonist John Marston steps off the boat in a battered cowboy hat and frayed waistcoat, utterly out of place.

A few bars into the piano melody that opens the game, a discordant clash of electric guitars cuts across the soundtrack. Bill Elm and Woody Jackson's score is deeply indebted to Ennio Morricone, but this piece in particular, Exodus In America, delivers its message masterfully. The old west is vanishing, but it is not yet gone. America's wild history is fading, but its biggest battles have not yet been fought.

Marston is a former bandit returning to the frontier on the promise of a pardon for himself and his family, his wife and son, although their safety is contingent on Marston capturing or killing the leaders of his old gang. We are not told this outright: it's something the player learns, piece by piece, as they guide Marston through an opening that is remarkable for its restraint. It takes around an hour for *Red Dead Redemption* to get to the point where it asks you to shoot somebody. That time is spent subtly introducing Marston's two 'lives' – the unrepentant cowboy and the reformed homesteader – and teaching the player the basics of horse riding, travel, and gunplay. The setting for this tutorial is a ranch run by Bonnie MacFarlane, a young woman who discovers Marston by the side of the road after he is shot by the very men after whom he's been sent.

Bonnie is one of *Red Dead Redemption*'s greatest achievements. As the game works to establish its various moral dualisms – the notions of savagery and civilisation that inform everything from the concept of manifest destiny to the game's own morality meter – Bonnie questions and deconstructs this system as only an outsider can. In their first few meetings, Marston will not reveal anything of his history or mission. "You are being deliberately obscure as a substitute for having a personality," Bonnie chides him, fondly slicing through not only Marston, but also the Western itself.

The Western is about heroes, usually men, who enter the picture from one side and leave on the other. Its defining images are the ride into the sunset and the middle-distance stare. It is about unknowable people, and this presents challenges when transferred to a medium where the viewer is in control of the lead character at all times. It's difficult to have John Marston leave the picture when he is the camera's only focus.

His early relationship with Bonnie provides Rockstar with a deft solution to this problem. The player acts as a third party in a romantic scenario that is not, in effect, a romance. Marston is married, and so Bonnie's growing interest is impossible to reciprocate. For the player at this point, however, Abigail Marston is an unknown quantity – it's Bonnie's perspective that we adopt as we learn about John, and it's John's relationship with Bonnie that is defined by the player in those early missions.

The game presents opportunities for heroism that aren't violent, but are rooted in the types of things Marston is good at. In one early mission, he chases down and ▶

breaks a wild stallion that bolts from its pack. Later, in A Tempest Looms, the player is asked to ride ahead of a herd of stampeding cows during a thunderstorm. The stakes here are not immediately deadly for either Bonnie or her ranchers, but the loss of the herd would doom the ranch eventually. The mission demonstrates the fragile balance of life in the west while framing Marston as a solution to that fragility, rather than part of the problem.

Crucially, it also gives the player freedom to determine the extent of Marston's heroism. Like the horse riding, which is unintuitive at first but reveals finesse with time, herding these cattle is not a binary proposition. It's possible for you to lose a substantial amount of the herd without failing the mission, and Bonnie's reaction is the way the game subsequently rewards or punishes the player for their effort. Even as Marston's eyes are looking elsewhere, the player's are locked squarely on this place and this relationship.

What soon becomes evident is that the MacFarlane ranch has a Marston-shaped hole in it. When Marston leaves Bonnie for the last time near the end of the game, he is riding off to meet a tragedy that is grounded in his dual nature. Through Bonnie – and the future that she wants for him, but that it is impossible for him to have – the game intimates an inaccessible third option. *Redemption* binds him to a destiny that is always just out of shot, and it's this that makes him a Western hero rather than a shooter protagonist with a cowboy hat on.

An implicit suggestion here is that the player is focusing on Marston's story, but this isn't necessarily the case; this is an open-world game, and other options are available. The game's toolset allows Marston to run off and wear a top hat, to hogtie villagers and leave them on railway tracks, to hunt coyotes in perpetuity. Played like this, the game is perhaps most notable for its scenery and its audio design. There's the sweeping expanse of the Great Plains, the sun rising over mesas in the far south, the sting of vibrato guitar and the sound of the wind in the long grass. It's still a great game in these circumstances, but its greatest moments occur when these strengths are used to support a directed narrative.

In one unforgettable sequence, Marston rides to Mexico for the first time as Jose Gonzales' Far Away plays for the only time. The section matches the song to the length and shape of the road, and while the device is pure cinema, there's something of the magic trick to the way it's folded into an interactive experience. Later, the same trick is applied to Jamie Liddell's Compass as Marston rides hard from the mountains down to the Great Plains, where his family is waiting for him.

If *Redemption* were consistently this deft, it would be one of the best games ever made. Unfortunately, it's let down by a sagging middle section as well as characters



Redemption **is capable of elegance, but this is matched by bugs that lurk at the periphery. For every well-composed cutscene, there's a character who gets stuck halfway through a horse**

MARSTON'S BOUND TO A DESTINY THAT'S ALWAYS JUST OUT OF SHOT, AND IT'S THIS THAT MAKES HIM A WESTERN HERO





TOP ***Red Dead Redemption*** **still offers a powerful sense of place thanks to excellent lighting and environments.** ABOVE **Long rides between different locations are used to develop the relationships between characters, and these are some of the best examples of its deft writing**

THE LAST ENEMY



Right at the end of *Redemption*, the game presents a dramatic shift in focus (beware: spoilers ahead). Following a hopeless last stand with government troops, Marston dies. The endgame is played out by Jack, John's son, as he inherits all of his father's equipment, achievements and missions. On the surface, it's a chance to keep playing after the end of the story, but Jack, with his lack of given motivation, also lets you flip your moral compass if you desire. He's the model for *GTAV*'s protagonist switching, as well as a transmission of creative authority to the player.

and side plots that don't contribute to the overall sweep of the thing. After that dazzling introduction to Mexico, Marston fights for both sides in a civil war and guns down hundreds of men – most them while firing a Gatling gun from the back of a train. The player's choice of faction is meaningless, however: both sets of missions need to be completed, and Marston's tenuous reason to be involved at all turns the section into little more than padding. If the game ended with the completion of Marston's mission across the border, it'd be a case of a best-in-class opening that couldn't quite develop into a coherent game.

After Marston's time in Mexico, however, Rockstar achieves something remarkable. The game's pace and focus tighten, and the player's aims become aligned clearly with Marston's for the first time. As you fight initially to redeem his inner bandit and then to reclaim the life he has chosen, you explore the breadth of the character. The ending that follows (see 'The last enemy') is so affecting, and so accomplished in its execution, that it has arguably not been bettered since.



The era's low-rate-of-fire guns slow the pace of combat but provide a greater sense of impact when shots connect. Sticky cover detection can be a problem, however

In January 2010, several spouses of Rockstar San Diego employees posted an open letter complaining about working conditions during the final year of *Red Dead Redemption*'s development. The letter is a reminder that this is the work of a great many more people than are credited in the introductory sequence. When discussing the game's artistic successes, it is tempting to celebrate individuals, but this version of the old west wasn't conquered by a handful of heroic pioneers. It was built, grain by grain, by the team in San Diego.

This staggering technical achievement is the scaffolding that supports everything else that *Red Dead Redemption* subsequently accomplishes. That this is the case for big-budget games in general is an even greater reminder of the need to remain conscious that these are ultimately collective works, not individual ones. The myth of the old west suited Rockstar. It reflected something of the developer's own individualism, an attitude to creativity that emphasises style, strength and independence. But a myth is still a myth, and while the notion of a lone star is a tempting romanticisation of *Redemption*'s origin story, another American idiom – e pluribus unum, 'out of many, one' – is closer to the truth. ■



CRYTEK

Image from Ryse: Son of Rome achieved with CRYENGINE®

Visit us at
E3 2014
June 10-12
West Exhibit Hall
Showfloor **# 4500**
and PMR **# 303B**

THE POWER TO ACHIEVE YOUR VISION

CRYENGINE® – THE COMPLETE GAME DEVELOPMENT SOLUTION

EQUIP yourself for the future of gaming now with CRYENGINE® - the only multi-platform engine that delivers state-of-the-art lighting, physics, AI, animation and fully real-time design tools, out of the box.

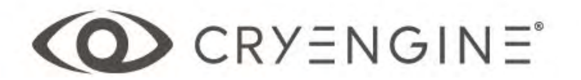
CREATE new gaming worlds using the production-proven real-time CRYENGINE® Sandbox™ editor and accelerate your development with the many features invented and pioneered by the world-famous CRYENGINE® team.

WORK with dedicated developers in the US, UK, Germany, China and Korea; benefit from Crytek's unique experience in developing console and online games, to build benchmark-setting games in all markets.

JOIN our community of major game studios and more than half a million indie developers using CRYENGINE® to create some of the worlds most popular online games and the blockbuster hits of the future.

ACHIEVE your vision with CRYENGINE®.

For more information, visit **WWW.CRYENGINE.COM**.



Region Specific: Hamburg, Germany

Inside the city state meticulously producing some of the world's biggest online games

When we talk about insane levels of popularity in today's videogame landscape, we often reference *Minecraft*, one of the few titles to have earned the label 'phenomenon', having sold approximately 50m copies to date across PCs, consoles, phones and tablets. And yet in terms of player numbers, it is overshadowed by a game that gets little mainstream recognition: *Goodgame Empire*, whose player count is on its way to 57m. In this edition of Region Specific we travel to the home of *Empire* and other online games collectively played by hundreds of millions across the world, to shine a light on a community whose achievements deserve wider recognition. To begin, we look across the region to identify some of its unique qualities (1) (p128), and then gather key players (2) (p136) to discuss how Hamburg has evolved in the five years since we previously visited, along with the challenges it faces as its industry adapts to the mobile market, and where it's headed in the future. In the first of our Studio Profiles, we visit the rapidly expanding Goodgame Studios (3) (p136), before dropping in at Deep Silver Fishlabs (4) (p140), the mobile-focused developer whose portfolio ranges from *Sports Car Challenge 2* to *Galaxy On Fire*. Our final stop is at InnoGames (5) (p142), another vital part of Hamburg's storied strategy game family and the home of *Tribal Wars*.


1
4
AVENTADOR
2
3
5





1

2

Hamburg

GAME PORT

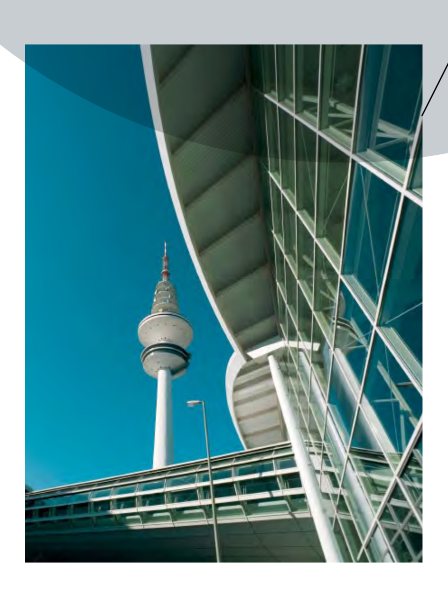
Exporting to 200 countries across the world, Hamburg's videogame industry is continuing to grow at a hectic rate

3



5

4



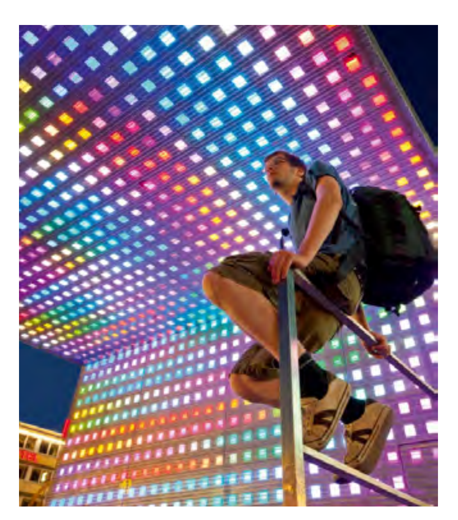


LANDMARKS
1 Hamburg's Rathaus – essentially its city hall – serves as the backdrop to the city's Christmas market.
2 The harbour area is home to some of the city's most charismatic architectural styles.
3 The Speicherstadt, Hamburg's warehouse district, is the biggest of its type in the world. The area features several museum attractions.
4 A view across the city's extensive port facilities. The port itself, the largest in Germany, covers nearly 30 square miles.
5 Hamburg's media industry employs over 70,000 people. Its TV/radio tower is the city's tallest building

Like many big, lively cities with artistic streaks running through them, Hamburg isn't short on grafitti, to the extent that you become desensitised to it after your first 24 hours in town. Except, that is, when it catches you by surprise, as it does when, driving between game development studios, we see a freshly rendered "HAUS STARK" (House Stark) adorning an apartment block. This amusing show of support for the battered clan of Game Of Thrones, whose fourth season has just debuted as we visit Hamburg, demonstrates how far the HBO series' popularity extends in 2014. And it's no surprise that it has captured the imaginations of Hamburg citizens: these people have been raised on a rich diet of strategy games centred on warring factions, crafty politicking and the pursuit of empire building. Today, some of the world's most popular examples, played by tens of millions of fans across 200 countries, are made here by a videogame industry that employs nearly 4,000 people across 140 companies.

The seeds were sown many years ago, but the astonishing global growth arrived with the advent of web technology powerful enough to run games within browser windows, independently of clients. When we came here five years ago for our first Hamburg Region Specific, we found a community in thrall to the commercial opportunities offered by free-to-play browser games such as *Fiesta Online* and *Seafight*, published by Gamigo and Bigpoint, two of the original behemoths of Hamburg's web gaming scene. It's not just player numbers that publishers find so appealing about browser games, but also their durability: both *Fiesta Online* and *Seafight* are still operating today, continuing to draw big audiences entirely comfortable with the world of microtransactions that powers an economy that is mind-boggling in scale.

The broader landscape here has changed, however. The shine that once accompanied Bigpoint and Gamigo has dulled somewhat, allowing more dynamic companies such as Goodgame Studios and InnoGames – each with their own legions of in-house development staff – to take their places. The shift has involved an incredible pace of growth on the part of Goodgames in particular – the company was formed just five years ago but already employs over 800 staff. "We have to reinvent ourselves every six months because we're growing so rapidly," admits the company's CTO, **Stefan Klemm**. "We have totally different processes now to what we had a year ago, and that's a challenge." The company expects to employ a workforce of "several thousand" by 2020, and in order to manage such growth has put in place what Klemm calls "a very sophisticated HR process", which is overseen by an HR department that is enormous in scale. It has to be: during March alone, the company received 4,000 job applications. Only about 1.5% of those aspiring employees will be successful. The process of turning 4,000 CVs into 60 passionate new Goodgame staff is a challenge, but the company long ago made the process a little easier for itself by encouraging all-comers, not just German natives, to come and work at its studios.



Hamburg's famous nightlife scene, born many years ago from its status as a lively port, draws revellers from across Europe

"We have to reinvent ourselves every six months because we're growing so rapidly. We have totally different processes now to what we had a year ago"

In the centre of Hamburg, at InnoGames, another recruitment drive is taking place, albeit on a more modest scale. Those fortunate enough to make it to the interview stage might have the opportunity to explore the company's new meeting rooms, all of which have been designed and decorated to pay homage to beloved videogames of yore, from *Pac-Man* to *The Lost Vikings* to *Morrowind*. The company's passion for games is literally up there on its walls, and it's a kind of enthusiasm that is deeply infused throughout Hamburg's development scene as a whole.

Partly, this passion comes from Germany's long-standing fascination with strategy games of all stripes. The region has for many years been responsible for the world's most cherished strategy board games, and there are no bigger fans than in Hamburg. "Almost every designer here and even the programmers are very avid board game fans," says **Michael Krach** of Deep Silver Fishlabs, creator of the hit *Galaxy On Fire* series. "I think there's a very natural interest in board games because of what they represent: it's gaming nights, it's turn-based play, it's victory conditions, it's pure game design. When you start game design, you don't need a computer. The first lesson is when you simply play a very successful board game and use it to learn the basics."

InnoGames has the bug, too. "A lot of our people play board games together after work," says **Dennis Heinert**, the company's head of PR. "One of the lead designers of *Forge Of Empires* has been a passionate designer of board games for 20 years. The connection between videogames and board games is very close."

Hamburg, then, is a region with gaming in its blood, and its interests reach far beyond the companies making big noises via the browser-game market. The console game studios 49Games and SnapDragon Games may have closed since our previous visit to the area, but a succession of startups have emerged in their place, including independent studios such as Rockfish Games, formed by ex-founders of Fishlabs, and MMOG specialist Xyrality. Then there is Daedalic Entertainment, which remains as passionately committed as ever to its craft of point-and-click adventure game production.

Backing up all of this is one of the world's most effective game industry support networks in the form of gamecity:Hamburg, which was formed in 2003 and has succeeded in getting videogame production in the region recognised as a serious business at governmental level, following years of profile-building work. Given that Germany once took a dismissive attitude toward videogames, it's no small victory. But when Hamburg's videogame industry is reaching out to hundreds of millions of players around the world, creating so many job opportunities here and turning over so much revenue, how could it possibly be treated as some kind of second-class citizen any longer? ■

REGION SPECIFIC
DISCUSSION




THE STATE OF STRATEGY



Hamburg's industry leaders discuss the region's past and future as it continues its expansion on the global stage



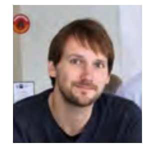


Christoph Graf
Head instructor, SAE Institute


Dennis Heinert
Head of public relations, InnoGames


Michael Krach
Head of studio, Deep Silver Fishlabs


Stefan Klein
Managing director, gamecity:Hamburg


Andreas Haase
Press officer, Goodgame Studios

Assembled for today's roundtable discussion are **Dennis Heinert**, head of public relations at InnoGames, **Michael Krach**, head of studio at Deep Silver Fishlabs, **Christoph Graf**, head instructor at Hamburg's SAE Institute, **Andreas Haase**, press officer at Goodgame Studios, and **Stefan Klein**, managing director of gamecity:Hamburg. Given that we've done this kind of thing here before, in 2009, it makes sense to begin by catching up on what's been going on in Hamburg's game industry since.

When we came here five years ago, the free-to-play browser-game market was really taking off, and the market has grown massively since then, but what else has happened here?
Dennis Heinert I think Hamburg is an example of the current trend in the game industry as a whole. Mobile gaming, and free-to-play gaming in general, is growing basically everywhere, while games shipped in boxes, and classical triple-A production, is getting more rare – it's getting packed into fewer studios that can actually afford that kind of development. So I don't think Hamburg is different in this respect, but I think what is special about Hamburg is simply that it was strong five years ago when you visited and it's still very strong today. That's partly thanks to gamecity:Hamburg contributing a lot, but also it's a matter of coincidence, because not every company that started out here did so because of gamecity. In Germany there isn't another city that has as many big – and small – game companies as Hamburg.
Michael Krach I wasn't working in Hamburg when you visited five years ago – I was working in Frankfurt and Stockholm at major console studios – but I've been back here, where I was born, since the beginning of last year. And I'm glad to have been able to come back. A lot of things have changed. Some impressive companies have been built in a very short amount of time, and others have changed completely – Fishlabs has changed ownership, for example, and to some degree direction as well. So now you can come to Hamburg and it doesn't matter what branch of gaming you work in – console, PC or mobile – because there is a major accumulation of potential employers, projects and education here. I'm settling down here as a game maker – I have a family now – because I think Hamburg will always play a role in making games.
Christoph Graf I came to Hamburg in 2011, so I wasn't here to see much of that change taking place, but one major factor for me coming here – I'm originally from Vienna – was that Hamburg is quite a hotspot for game development in Germany, and for the centre of Europe. In Vienna it was kind of hard to educate people and get them jobs later on because we had only one large development company – Sproing – so it wasn't easy for graduates to get work in the local industry. In Hamburg you have companies that can hire our students, and we also have the chance to get lecturers from these companies, and that's become a big part of our education programme, getting people who are working in game development to teach our students. So I'm very glad to be in Hamburg. The past two-and-a-half years, seeing industry people coming in to teach, and seeing students take jobs at studios here, has been a really good experience.
Andreas Haase Goodgame Studios started around the time of your visit in 2009, so that's the biggest change for us, obviously, that we weren't really around back then. And I can't really judge the entire development scene here because I started working in the industry in Hamburg three years ago, but what everyone is saying is right – a lot has been going on since then. I think in Hamburg we have three companies that are global players in the game industry now, with several-hundred-million players around the world, and I think we've grown to become professional companies. We're not just gaming companies any more, we're technology companies with a very international outlook. I think that's the biggest development that's happened not even in the past five years, but maybe just the past two or three years: we grew a lot, and the companies learned a lot and really developed as enterprises.

> "It doesn't matter what you work in – console, PC or mobile – because there is a major accumulation of potential employers, projects and education here"

Something we should've asked in 2009 involves strategy games: why do you think companies here are so successful in the genre?
DH Well, one thing that has always been very particular about Germany is that there's no huge console development tradition here, so PC gaming was always stronger, and PC gaming tends to be more focused on strategy games in general, although of course there are exceptions. While traditional PC gaming somehow declined and browser gaming became a lot more popular with certain PC gamers, this big trend for creating strategy games that can run in a web browser somehow moved here as well. So I think that there's a lot of strategy gaming expertise here simply because of the history of PC gaming in Germany. And German consumers love strategy games, which in itself has inspired a lot of companies to focus on the genre.
Stefan Klein Maybe there's also the fact that, traditionally, there was a different way of playing games in Germany. Consoles have never been as popular as PCs for gaming here because the family TV set was something you wouldn't give over to your children in Germany. So historically, families didn't tend to use the TV set for gaming, which led to fewer console games here.
MK With PCs, you look at the platform and the power available to you, and you think: what can I use this platform for best? And the mouse-and-keyboard setup, together with the huge screen which you sit close to – it's a very concentrated setup – means that it's different to gaming in the living room. In a PC environment, the player can deal with lots of detail and complexity, and that in itself becomes something people crave. So, simply because the platform allows it, this is where lots of creativity and talent has been funnelled. People look at the platform as a place for complex systems with an interface that consists of 50 clickable buttons, which would be unthinkable if you were using a console controller. So it's almost Darwinistic that we're in the position we are today. We definitely didn't have the console market that existed in Great Britain and France, but today we do have good console development in Germany. There's not so much of it happening, but we have people in Berlin and Frankfurt who do amazing work on consoles.

What has it been like to see the browser-game market slow down after seeing it grow at such an incredible rate in recent years?
DH It's still a growing market but it's not exponential any more. But that's normal and it's what you would expect.
AH It's not a new market any more, so it's similar to the mobile games market. With mobile, maybe three or four years ago you were still able to ▶

have a worldwide hit from a small startup company, but now we have hundreds of competitors releasing new apps every day and it's much more expensive to get recognition.
MK As someone who works exclusively on mobile games, it's understandable that my opinion goes a little bit further. I would say yes, definitely, that mobile gaming is on its way to making browser gaming obsolete. It's a question of timing. Of course browser games represent a super-viable market – I agree with you that it's still growing, and there's still lots of money to be made from browser games. But the things that make browser games great, such as mainstream appeal and accessibility – it runs in the browser; you don't need to install a client; you can play it anywhere where you sit down at a computer – are even more appropriate for your personal screen, for your smartphone and your tablet. Every game that shines on a browser – and where the economics behind it work and it's accessible, it's mainstream and it's beautiful – shines even more on mobile. Some of the games InnoGames and Goodgame are making are performing really well as browser games, and you're taking them to mobile, right? And it's easy to see why. I think in ten years from now every PC will be carried around in the pocket. A mobile or a tablet is a personal screen, and that can't be ignored.
AH But so far, for us, our mobile versions are bringing in new players, so it's not that we're cannibalising our browser version of *Empire* with a mobile version, for example. It's a new user group that we reach via mobile.
DH It's the same for us. I think we all agree that mobile is growing, but I don't see browser games completely disappearing.
AH I think it's the same for console games – there will always be a market for them.

Do you think we'll reach a point soon where Hamburg produces only free-to-play games?
MK I don't think that will ever happen. I've worked almost exclusively on what you would call free-to-play games, which offer an initial experience for free, but the new generation of consoles and the very healthy development of Steam, and of indie titles and premium titles, shows that gaming is really broadening its reach, and that means that there is a bigger range of pricing models. You can pay $69 for a boxed title, plus $50 for the season pass, which makes $120 for one game, and then you have the free-to-play games that are monetised only by progression boosts, and then in the middle ground you have episodic gaming and also premium games with very far-reaching free demos. There is a spectrum, but it all exists on the same line. This orthodox separation between free-to-play and not free-to-play… The term 'free-to-play' itself is harming the discussion because it's oversimplifying something that exists across a spectrum. The difference is the point at which you ask the player: how much is this experience worth to you personally?

Ultimately I think as a gaming city we will always offer every kind of game. If you work in games, for nine out of ten people your first question isn't, "Oh, will I be making premium or free-to-play games?" If I'm a good 3D artist, if I'm a good producer, if I'm a good designer, if I'm a good coder, I don't care about that sort of thing. With development of free-to-play games, some people are like, "Oh, no, that's Hell – I would never do it". That's bollocks. I mean, good second-to-second gameplay is good second-to-second gameplay. So, to answer the question, I think that day will never come – hopefully we will always offer the whole spectrum of everything that games can offer, on all platforms, using all pricing models. That would be great for Hamburg.
SK Hamburg just recently started a new initiative called nextMedia.hamburg, because we are a media city, with a lot of publishing houses, and as you all know, media companies are having severe problems in terms of selling content. So this new initiative for the media means that, as a city, we're bringing together people who've got experience of monetising content with people who are in the process of working it out. The game industry has experience of selling digital content, and the huge media houses are looking at their models to see how they can monetise good journalism. Everyone has this expectation that everything should be available for free, but good journalism can't be free. How do you buy things to put in your fridge? With money. So you have to pay for good journalism, and we've got companies in our city who know how to monetise content, so that's one of the things on the agenda of nextMedia. Hamburg – sharing that experience with other media. And we have a lot of high-profile publishing houses here. Spiegel Online was online before Newsweek in the US – we were very early adopters of digital media – but now we've reached the point that we have to teach the audience out there that you have to at least pay for a part of it, and the game industry can help with that process.

"With free-to-play, some people say, 'Oh, that's Hell – I would never do it'. That's bollocks. Good second-to-second gameplay is good second-to-second gameplay"

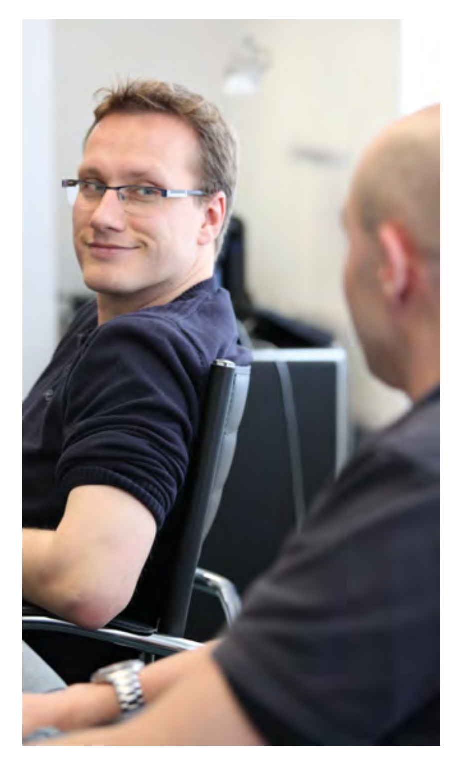


Looking over the past five years, what are the most dramatic changes you've experienced?
DH The biggest thing that's changed for us is that development cycles of single projects have grown so much. That's not only for marketing reasons but also because mobile has become a consideration, and we have higher graphical demands and more complex games all round. The demands of consumers have simply increased a lot in the past five years. When you talk about free-to-play, look at what we have today and think about the games that were out in 2009 – today's games are much more complex. Also, in the free-to-play market, games are published and then they're developed further, which is something else that has changed, because there is so much competition nowadays. It is completely ignorant to publish a mediocre free-to-play game now. It makes no sense because

it won't make it. You need to focus on high-quality products and then take into account that everything takes longer nowadays.
AH I think that is a big change compared to five years ago, when the strategy was, OK, let's publish ten games really fast, each with a development cycle of three to six months, and if one or two of them work out then that's good. But you can't do that any more with how complex games have grown.

Stefan, in 2009 you said that the German government hadn't been taking games seriously but that its attitude was changing – what has happened since then?
SK Well, that was the federal point of view – it hasn't been the point of view of my city state, because keep in mind that Hamburg is a federal state, and we've always had backing. But despite that we've always had different politicians and different coalitions – within the past 15 years of doing business development I've dealt with every type of political colour. We were founded in 2003 under a Conservative local government in Hamburg, but in Bavaria the game industry was still regarded as something like the porn industry. But my federal government looked at the games industry as a vital part of the whole media industry, and we've always tried to raise the level of self-esteem in this industry to at least the level of the film industry, and that's something I think we've achieved now. So it's a business that's growing up, and it has to behave like a grown-up, with no childish fooling around. Videogame developers in Hamburg are really big companies in comparison to traditional media houses, printing houses, etc, so it's relevant to the local government because it's an industry with a lot of people working in it. Videogames have reached the level we've always wanted them to have.

When people look at Germany they often see a two-horse race between Hamburg and Berlin. How do you think that race is progressing?
SK Well, when I was talking to Google about opening their German offices they contemplated going to Munich and Frankfurt because those cities have huge airport hubs, and then they said they were considering Berlin because they wanted to be able to talk to its politicians easily. But then I told them that they can reach Berlin from Hamburg within 90 minutes and they said: "You mean Hamburg is a suburb of Berlin?" [Laughter.] Berlin is quite close around the corner, and we have a lot of people who commute in the media business,



especially when it comes to print – we are quite close. If you look at inhabitants, though, Berlin has 3.4m people and we have half that many in Hamburg, but when it comes to business we reach the same amount of money. Berlin has a huge advantage with its cheaper labour force because living in Berlin is cheaper, so opening up studios in Berlin is not as difficult as it can be here – they've got cheaper office space and a lot of it, while we're lacking in cheap office space for startups, for example. I'm very thankful to InnoGames, who just opened their InnoHub, which doesn't focus solely on the games industry because everyone is keen to attract people from the wider digital industry.

Of course there is a race between Berlin and Hamburg, and I think we've reached a level, with 4,000 people working in the industry here, which is really quite strong, but I don't see that we can't exist, as neighbours, on good terms.

We've looked five years into the past, and also at today's market, but how about five years into the future? What's the game development scene in Hamburg going to look like in 2019?
AH At Goodgame we have what we call our Agenda 2020, so it's for six years in the future, but it will give you an idea of our ambitions. You have to set your goals high, and we want to be among the 20 biggest games companies in the world, revenue-wise. If we reach that target, we will have several thousand employees, and we'll be working on a great many projects, probably in varied categories.
MK In five years, I hope that Hamburg has kept developing at the pace it's developing today, but I hope it does so without major disruptions. I hope that we'll be supporting all platforms, I hope that the education sector will be continuing to grow and becoming even more professional, and I hope that we'll see support for new ventures. I want Hamburg to be on a par with any city in Germany when it comes to capital investment, and I would like to see a big independent incubator financed by the city, allowing all of the big companies to become involved and where the money that comes in isn't forced to finance one or two small projects but there are maybe 50 options available. Ultimately it's about Hamburg living up to its potential in Europe.
DH In the next five years, I assume that the trend of gaming becoming more and more mainstream will continue, which will affect us. Maybe the UK is a bit further ahead already because somehow games have always been mainstream there, but in Germany it hasn't been the case. It started with browser gaming and Facebook gaming, and now mobile is putting the gaming industry, and thereby gaming, more and more into the mainstream. It will lead to an even greater variety of games and types of genres, platforms and business models. I agree with what Michael said about business models: in the future, there will be various options – free-to-play will be only one of them.

But in general at InnoGames we don't have a very specific five-year plan because we don't believe that you can actually plan like that in this industry. We're very happy when we can plan our next 12 months in a precise way. Of course we have things in the pipeline that will take longer than 12 months, but everything is so dynamic that concrete development plans are nearly impossible. That's the biggest challenge for gaming companies becoming bigger and bigger – staying agile, so that you're able to react to trends as soon as possible. In my eyes, that's the key for future success. Because not many people can foresee what's really going to happen, but if you can react very quickly, you are in a good position. If you can't, because you're not agile enough, well, your time has already passed. ■

Goodgame Studios

Inside Germany's fastest-growing game developer



Founded 2009
Location Hamburg
Employees 800+
URL www.goodgamestudios.com
Selected softography *Goodgame Poker*, *Goodgame Gangster*
Current projects include *Goodgame Empire*, *Goodgame Big Farm*, plus two unannounced mobile games





Big Farm **and** ***Poker*** **are among Goodgames' biggest titles, the latter attracting nearly 17m registered players to date**

Brothers Dr Kai Wawrzinek and Dr Christian Wawrzinek started out, like many **Edge** readers, playing 8bit computer games and experimenting with creating their own. It wasn't until much later, however, that they turned game development into a career, founding Goodgame Studios in 2009. As relatively late starters in the world of commercial game production, perhaps they felt like they needed to make up for lost time, because Goodgame has since enjoyed a rate of growth that makes traditional videogame companies look like dinosaurs. But then Goodgame doesn't exist in the same world as traditional videogame companies: it started out making browser-powered games, and has more recently broadened its focus to create mobile titles too. At the heart of it all is a proven free-to-play approach that ensures the company access to as broad an audience as possible.

And the company's reach is phenomenal. At the time of writing, its most popular title, *Goodgame Empire*, has over 56m registered players, while second-placed title *Goodgame Big Farm* has over 26m. Across its portfolio, over 190m people have signed up to play, from over 200 countries, with bespoke versions created for 27 languages.

Supporting such an enormous playerbase is a big task, which is one of the reasons why Goodgame now employs over 800 staff. But other elements play crucial roles, too: the company devotes enormous resources to the tech that delivers its games, and then still more to the process of analysing the relationships its players have with its titles, in order to improve them. Throughout it all there is an attention to detail that makes Goodgame's work stand out in a marketplace that wasn't built on extreme levels of polish.

> Across its portfolio, over 190m people have signed up to play, from over 200 countries



Goodgame Gangster **began life as a Mafia-themed title, but a broadening of focus and a visual overhaul ensured a wider audience. Today, it has nearly 23m registered players**



Empire**, the company's most popular title, is a strong illustration of Goodgames' attention to artistic detail**

Growing at such a pace hasn't been without issues. "We went through a very interesting learning period when we were at around 100 staff," CTO **Stefan Klemm** explains. "We said, 'OK, let's make a lot of games at the same time,' and we had a lot of success, but we discovered that we couldn't put all of the love and all of the details into that many games, so we decided that we really had to focus on fewer games, and really concentrate on the details."

That was two years ago. Now, the challenge is to translate success in browser games to the mobile market. "We've been at the cutting edge of the browser market," Klemm says, "but we've only just entered the mobile market – [Android/iOS game] *Empire: Four Kingdoms* was launched just over a year ago. But mobile is the fastest-growing market, so we're very interested in it. And we're also experimenting with 3D graphics for new console titles in the future. It's an exciting time."







STUDIO INSIGHT
Stefan Klemm
CTO



Once the head of the Java development team at Bigpoint, Stefan Klemm has long-standing experience with mega-successful browser games. He explains how Goodgame goes about standing apart in a crowded market.

What do you think is the secret of reaching the sort of audiences that you attract with your games?
We really like to polish our games, right down to the smallest details, and we're very specialised. For example, we have a department that does nothing else but analyse the player's first game session. For a traditional game developer, what happens in the first session isn't so important because the player has bought the game by paying something like 40 euros, so he has a certain kind of commitment to it. But for us, the first session is so crucial that we created an entire department to analyse it, to look at it again and again to identify exactly where people drop out, what they spend the majority of their time doing, and lots of other factors. This is just an example of how we focus on extreme details and try to polish everything again and again and again. The nice thing about browser and mobile games is that you have the opportunity to try things out with A/B testing, so you can really listen to the community to see what they think. When we update a game, we immediately see feedback from the community, which is very important.

Also, in terms of content, I think people really like the visual style of our games. We get a lot of positive feedback about our visual design. I think another point is the strong interaction that we facilitate between our players. Of course, the actual gameplay differs between game to game, but the interaction that we encourage between players is always a big factor.

What about the company itself – do you think it's different from its competitors?
We have a very flat organisation – or at least as flat as is possible with 800 people! [Laughs.] Everyone in the company can say what he or she thinks. It doesn't matter if it's an apprentice or a senior member of staff – everybody can discuss anything with everybody, and I think that's very important. Of course, we have hierarchy, but never more than is necessary. And this philosophy – of being open-minded, and respecting everyone in the company – wouldn't change regardless of the size of the company, whether it's 20 people or 2,000.

How is the free-to-play market changing, and how are you reacting?
I think free-to-play is taking over at the moment. We're definitely going to see triple-A free-to-play games in the future, and that's basically because the majority of players want to play first and then pay later. We're going to see more companies reacting to that. And the free-to-play market is becoming much more professional at the moment, although there's still so much more to explore in this space. It's still so young, and I think it's very exciting.



Most of your games slot into familiar genres – how far do you think you can push beyond those themes?
I think now is the time to do different things, to be brave enough to go into different directions. Obviously it's a risk to try to do something new, but I think we're in a position now where we have very strong products and we can take risks. I think we'll definitely evolve from where we are right now – we have products in the pipeline that go in new directions. ■



Goodgames' HQ is spread across several buildings. Plenty of attractions are on offer, including a gym and even an outdoor pool



SIMPLY GO

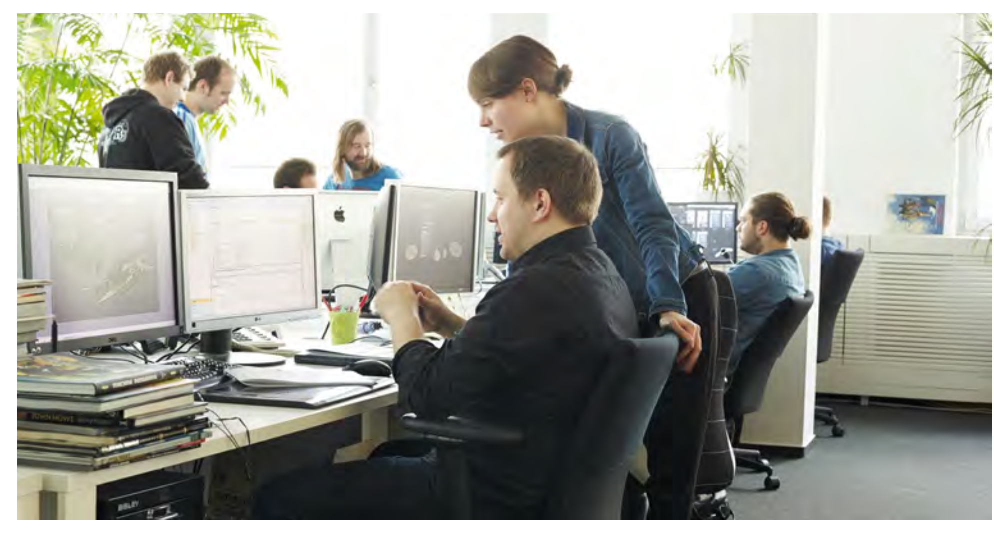
Deep Silver Fishlabs

A new parent company means a new start for the creator of Galaxy On Fire



Founded 2004 (reborn in 2014 as Deep Silver Fishlabs)
Location Hamburg
Employees 59
URL www.dsfishlabs.com
Selected softography *Galaxy On Fire 2 HD*, *Sports Car Challenge 2*
Current projects *Galaxy On Fire: Alliances*, plus two more unannounced titles





Fishlabs' offices are located right in the heart of Hamburg, in walking distance of the distinctly upmarket section of the city's shopping district



STUDIO INSIGHT
Marc Hehmeyer
CTO



Lots of game developers claim to offer diverse lineups, but few match up to Deep Silver Fishlabs, which has achieved colossal success with the deep *Galaxy On Fire* space-conflict games as well as the much more lightweight *Waterslide* series, which began life as a promotional tool for Barclaycard. Since becoming a part of the Koch Media Deep Silver group in December, the company has pared down its activities with promo apps, focusing instead on games for more committed players. Here, CTO **Marc Hehmeyer** describes the company's new beginnings, and its ultimate goals.

What is Fishlabs like now that it's part of the Deep Silver group?
It's a new company, and it feels like a startup. We want to leverage our legacy, of course, especially with *Galaxy On Fire*, and also we want to push the envelope, in terms of both gameplay and graphics, in producing triple-A mobile games for hardcore players. We have really high hopes that we can be *the* mobile developer here in Hamburg, but at the same time we're moving into publishing. Koch Media Deep Silver are really well known in the PC and console publishing world, and they saw an opportunity to get into the mobile sector by investing in Fishlabs. Some of us have ten years' experience with mobile – we have people here who know the business inside out – so that gives Koch Media Deep Silver a head start. With Koch Media's expertise on the publishing side and our knowledge of mobile, it's a great combination.

What are the defining qualities of a Fishlabs game, given this fresh start?
We're still heavily focused on delivering the kind of rich content you see in *Galaxy On Fire*. We wouldn't make *Ridiculous Fishing*, for example. So in that respect, we haven't changed as a company – it's what we did before and it's what we want to do in the future: create games for gamers. Our games can be played in five-minute sessions, but we also want people to play for two hours straight as well. We want to take the experiences you've known from your console or PC, as a mid-to-hardcore gamer, and bring those to mobile platforms.

With Deep Silver's investment, are you looking to grow in size, or are you happy at the current scale?
We're recruiting heavily right now. We don't want to grow at the rate of a company like InnoGames or Goodgame, though. I think a staff count of 90 would be a good number. If you push beyond 100, it doesn't feel like a startup any more. With 80 to 90 staff, hopefully we can release a great game every 12 months. We used to talk about development cycles taking three to six months, but now we're looking at a year, and having a couple of games in development in parallel.

When you have something as successful as *Galaxy On Fire*, does it make it difficult to experiment with other genres? Is it a double-edged sword?
If it is a sword, of course we're focusing on the gold side of the metal. When you have 15m installations of a game like *Galaxy On Fire 2* on iOS, it makes perfect sense to want to continue to work with the IP. But now that Koch Media is involved, with its own IP, we're much more open-minded about working with different game genres, but I can't talk about those yet. Of course, we'll make another *Galaxy On Fire* game, but there are lots of other opportunities ahead of us. ■

REGION SPECIFIC
STUDIO PROFILE

InnoGames

Talking tactics with a strategy studio that's playing the long game

InnoGames

Founded 2007
Location Hamburg
Employees 320
URL www.innogames.com
Selected softography *Tribal Wars, Grepolis, Forge Of Empires*
Current projects *Tribal Wars 2, Forge Of Empires* (iPad)





InnoGames' new offices house umpteen meeting rooms decorated to pay tribute to classic games. The result is an incredibly playful environment

STUDIO INSIGHT
Hendrik Klindworth
CEO



Hendrik Klindworth began creating games aged 14, and in 2003, with his brother Eike and their school friend Michael Zillmer, he launched the first iteration of *Tribal Wars*, upon which the powerful InnoGames empire was built. Calling on vast experience in free-to-play strategy titles, he's well placed to assess where the market is headed.

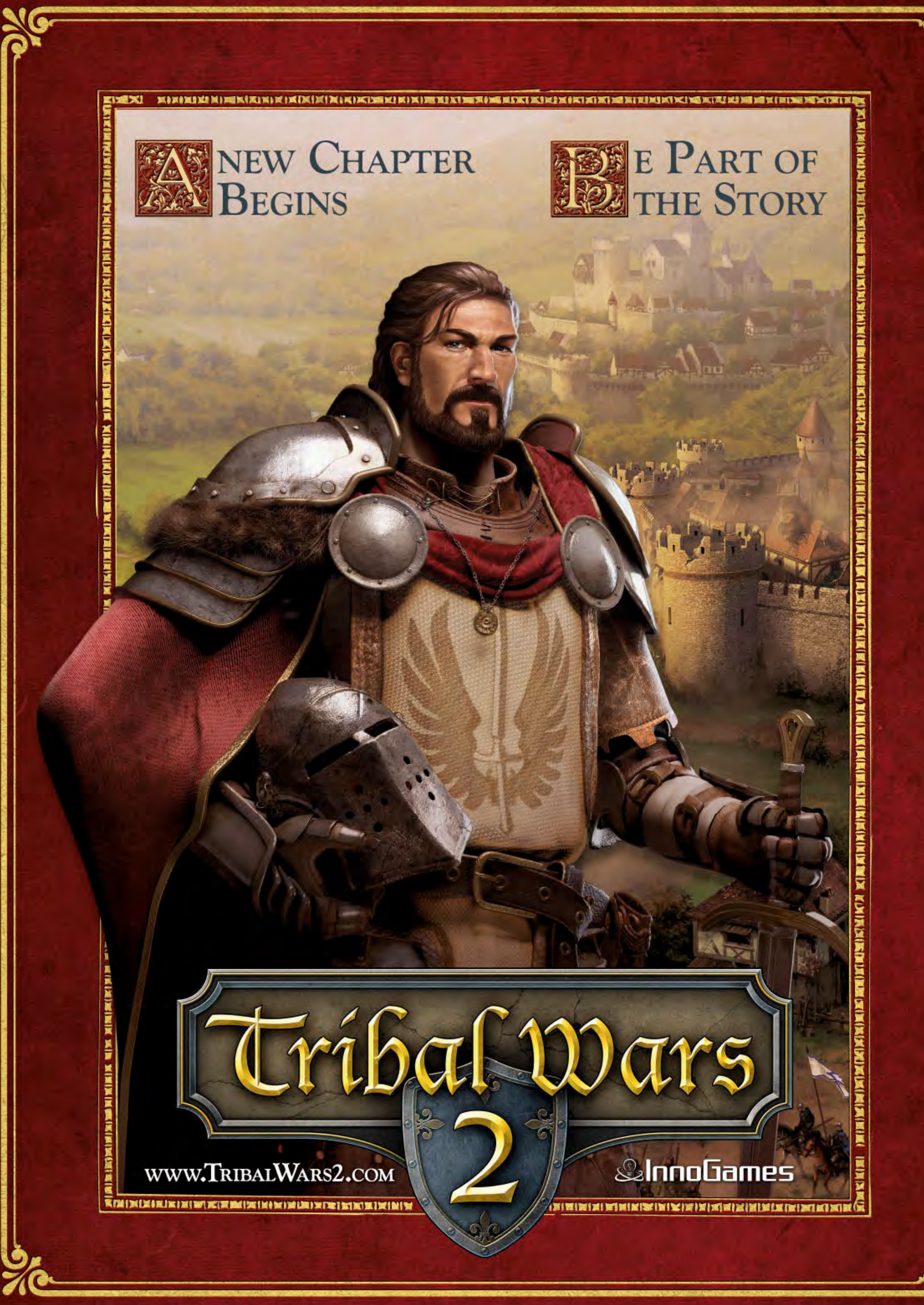
The market you operate in has become extremely competitive – how do you think your games compare to others'?
We have four big games on the market – *Forge Of Empires, Tribal Wars, Grepolis* and *The West* – and one thing we're very proud of is how sustainable they are. For example, *Tribal Wars* will be 11 years old this year, and it's still growing in terms of revenues. Last year was its best year ever, and this year it will be even better. So we have a strong focus on sustainability, and that's something that we're very proud of.

The term 'free-to-play' carries lots of baggage nowadays – how do you feel about it?
As a model, free-to-play can be a very fair one. It gives the player a chance to start playing the game to see if he likes it – if he does, then he might choose to pay. Maybe certain companies became a bit too greedy, and maybe that was a time when free-to-play's reputation became damaged. Another term that is interesting to me is free-to-win, meaning that you should also be able to win the game even if you're not spending money. I like it as a term, and maybe we'll see it become more popular in the future.

Does it feel like the boom time for browser games has passed?
The mobile gaming market is growing faster, of course, but I wouldn't say the browser market has peaked. The growth in pure browser games isn't as strong as it was in the past, but you would expect that because a certain amount of players are moving to mobile devices to play browser games, and some are also using multiple devices to play the same game, which is where it gets interesting. It's something we're keeping in mind with all of our games – it's very important that our games are crossplatform. All of our players tell us clearly that they want to be able to play our games on multiple devices, and we've made that possible with some of our games already, and we're working on making others compatible too.

How dramatically has the browser game market changed in recent years?
To some extent, looking back four or five years ago, the strategy browser game market was just too easy, but now it's a real business. I mean, the costs involved in acquiring a new player have risen into the sky, but on the other hand we've become much better at making games, so our players are more likely to spend more time with them. But the market has changed. In the early days, it was always clear to us it was too easy at that stage.

You have over 100m registered players – how large do you think that number could become in the future?
All of our games could still reach bigger audiences. But the great thing about this industry is that it's not like a game of Monopoly where there's only one winner – there's always room for multiple games from multiple companies. You can be very successful even if you're maybe not the biggest within the entire genre. But of course ultimately you have to define a genre in which you're strong and set out to be the best within it. ■


A NEW CHAPTER BEGINS
BE PART OF THE STORY
Tribal Wars 2
WWW.TRIBALWARS2.COM
InnoGames





JAMES LEACH

Postcards From The Clipping Plane

Conveniently ignoring the serious side of videogame development

One workplace stands alone in a world divided by class, status and chains of command. It proudly shows its flat management structure and disdain for pecking orders. It is the videogame development studio.

That paragraph isn't the trailer voiceover for a gripping summer movie – it's an observation from inside my head. But why would you find rigid lines of management and demarcation in an industry so fresh and exciting and new? And union-free? To answer this, just look around a studio. Go on. Walk into any one and look around. Easy. Oh yes, I know they've all got passkey cards, but you can get into all of them by waiting outside at around 10:30am on a weekday morning. Someone with a beard and trainers will amble past, drinking from a can of Dr Pepper. Follow them to the swipey door thing and they will use their card to open it, then they will hold it open for you. You're in. In the unlikely event there's a receptionist, tell her you've got to talk to Gary. Every studio has a Gary and off she'll trot to find him.

Now's your chance: look around. Clever people entrusted with making games are everywhere. There are meeting rooms, but no separate offices for the elite. No, this is a place where everyone is equal. I did tell you.

Someone, though, has to sit in the chair that's bigger and more expensive than all the others – the one by the window with the best view, and behind the nicest monitors. And while everyone else has cheap Japanese toys glued around their screens, this desk has a pristine model of his Mercedes AMG on a wooden plinth. Yes, this is the boss.

Yes, in this wonderful, modern meritocracy, there is a boss. So what does he do? Let's assume our receptionist can't find Gary, so we have time to find out. Firstly, the boss will be on the phone a lot. Those AMGs don't book themselves in for services, you know. (Actually, I think they do now.) But that's not all the boss does. He'll vanish suddenly to talk to a selection of panicking accountants. Then he'll come back slightly paler and will talk to a man in America. This American man will be called



Why is he leaving? Oh yeah, he's got that important thing to do. What's it called again? That's right, a wife

Chip, Buck or Hank, and will do almost all the talking. The reason is that he's the Boss. With a capital letter. You even say the word differently, like you say it when you refer to a man casually punching a shark unconscious on YouTube. During the call, our mini-boss will turn pale enough to be translucent. The call ends.

Our boss will make precisely three jokes about out-of-date memes to show coolness and that all is well, and then he'll casually demand that everyone is staying late to work. It'll be fun. And it'll impress the delighted publishers who are urging us to hurry up because they can't wait to see how great our work is.

Evening approaches. The clock reaches the usual home time and only one person leaves. Everyone looks up. Why is he going? Oh yeah, he's got that important thing to do. What's it called again? That's right, a wife.

It hits 7pm. The rest of the world is 'enjoying' The One Show, but our developers are toiling away. Then the man on the scooter arrives with 19 pizzas. Someone puts on some music from the vast selection of illegal MP3s that everyone shares. The atmosphere changes.

The mini-boss, having done his leading-from-the-front bit, eats more than his fair share of a pepperoni. He reminds the team to lock up and set the alarm at midnight when they all leave. He goes, and tries not to make the Mercedes sound too loud as he exits the car park.

Pizza eaten, the team move back to their workstations with carbohydrated energy and renewed purpose. Slimy fingers are wiped on mice and keyboards, and exactly 36 minutes of work will be done. In the sunlit uplands of a management-free world, this 36 minutes will contain the best, most effective work they've done all day. And then it ends when the head of art triggers a sound effect that could well belong to the loading screen of an MMOFPS. Yes, it's *Call Of Battlefield: Ghost Halo Recon Unit Six: Combat Team War Expansion*!

As one, our developers clan up and the world gets to experience what a bunch of like-minded gaming experts with stupidly powerful hardware, who can all talk to each other easily because they're in the same room, can do.

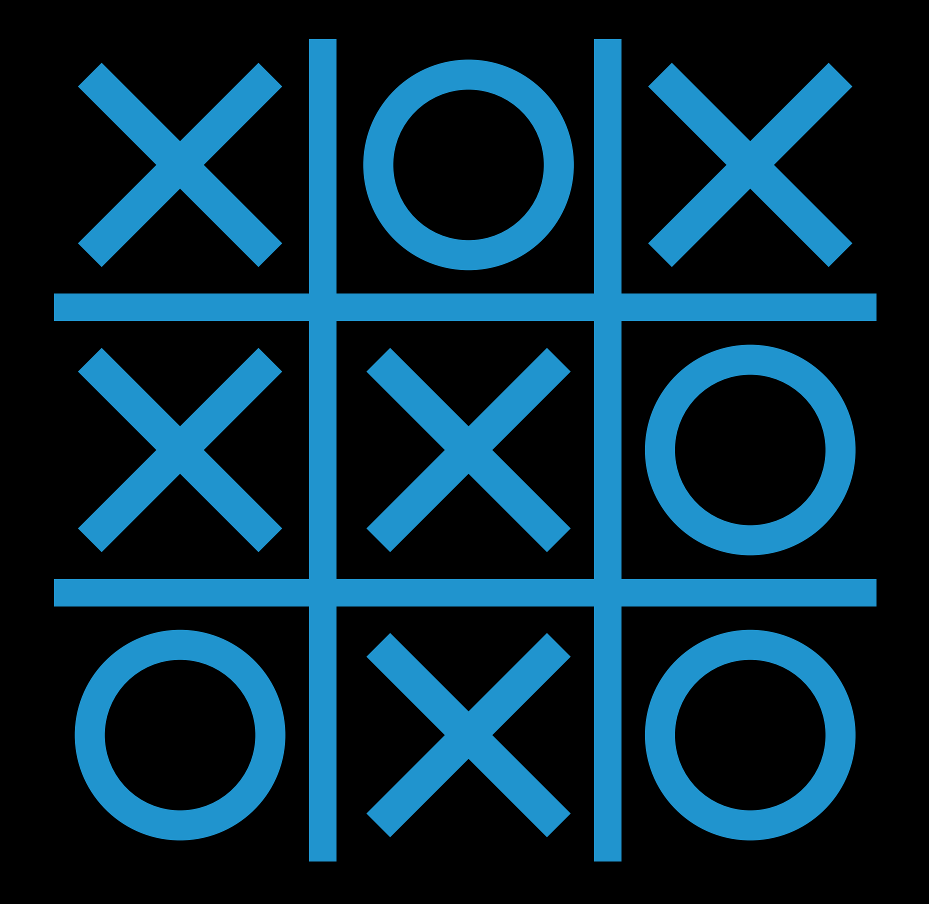
By 9pm, our guys are ranked second in the world. The global digital village is full of young voices claiming that they're cheating. No team is this good. By 10pm, our team takes first place. Just before this, the studio script writer left, so the kill/death ratio hits new highs.

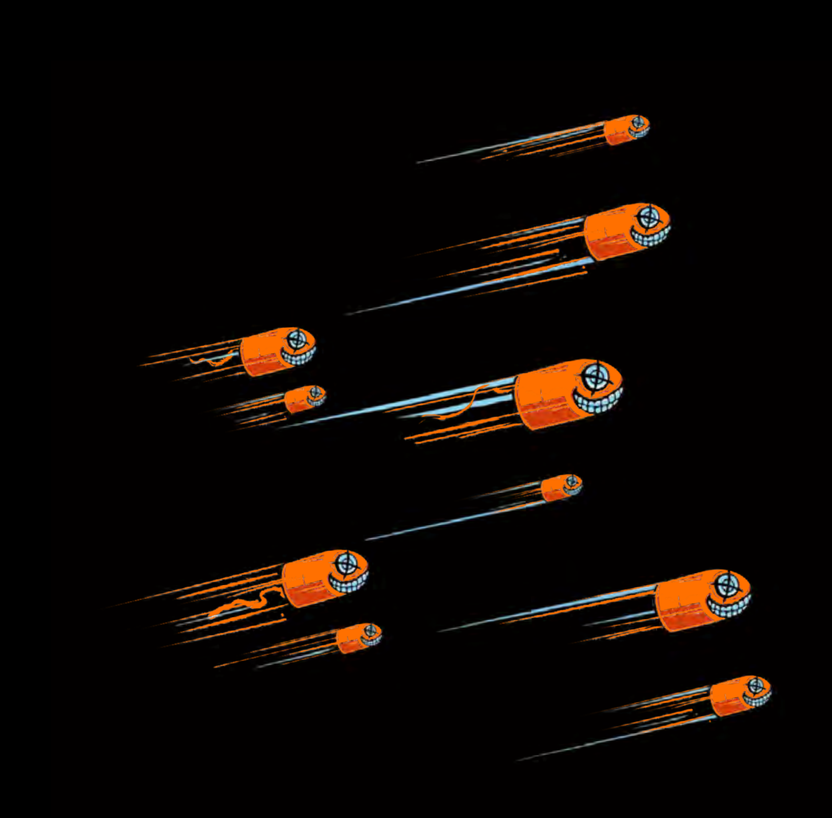
No one stays until midnight; that would be silly. They've got work in the morning. And in his house, the studio boss reads his emails. He rubs his eyes and decides he's had enough wine for tonight. He reaches for the whisky.

James Leach is a BAFTA Award-winning freelance writer whose work features in games and on television and radio

Illustration **box-kite-curve.com**

#268
June 5





9015



9000